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A STUDY OF THE RECRUITMENT OF ENGINEERING APPRENTICES
IN COVENTRY

In Two Volumes
(Volume I : The Thesis)

by
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A thesis submitted for the degree of
Doctor of Philosophy
in the Univerity of Warwick
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V O L U M E O N E

[THE THESIS]

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ABSTRACT

This thesis conceptually, theoretically and empirically examines the needs of industry through a study of the recruitment of engineering apprentices in 107 firms. In recruitment employers are forced to consider what they look for in applicants - to concretely define their needs.

The conceptual argument is that the needs that the concept 'needs of industry' refers to are labour power needs, but that the notion of needs in relation to labour power is incoherent. First, these needs cannot be specified in relation to the quality of labour power attributes to be socially produced or assessed in recruitment. Secondly, employers' statements of their needs are predicated on contradictions between aspects of labour power. For employers' needs to be met these contradictions require resolution, but there can be no ideal workers whose labour power is free of inherent contradictions.

The theoretical argument starts from the question of why researchers and commentators have stressed that employers' statements of their needs are confused or contradictory. It is argued that contradictions in these statements reflect contradictions within labour power.

The empirical argument starts from showing that engineering employers are not confused or contradictory in relation to the attributes sought in apprenticeship applicants. Furthermore, the relation between attributes sought in applicants and recruitment methods is generally consistent. Yet when attributes sought, other recruitment criteria (especially sex and race) and recruitment methods are scrutinised through the lens of recruitment channels - then the recruitment process becomes anarchic, as employers favour some applicants (sons of employees, owners and managers and clients/customers) and discriminate against others (especially female applicants) in relative disregard of the priorities established in their statements of attributes sought in applicants. The anarchy of the recruitment process rests on employers' social power, their power to discriminate, differentiate and give favour to applicants.

DEDICATIONS

This thesis is dedicated to the memory of

Frau JOHANNA RIKOWSKI (1897-1987),

my Grandmother,

and,

DEREK ROCHE (1954-1987),

who once said that:

'If you want to travel north and south at the same time, there is absolutely no point in going west.'

Hopefully, I have followed Derek's advice in this thesis.

ACKNOWLEDGEMENTS

Without the work of Dominick Cuming (1983) I would have found the classification of attributes sought in applicants in Chapter Six even more difficult than it was. Cuming's classification provided a basis for the classification of attributes in the thesis which was to some extent inter-subjective. It was not just myself that was allocating different attributes to the various classes. His work merits far more attention than it has so far received.

During 1980/81 I was very fortunate in having joint supervisions with Barry Lovejoy, a sociology postgraduate at Warwick, who was researching training in the building industry. The papers Barry presented in supervisions and the discussions we had in the University Library coffee bar were formative in terms of the theoretical position presented in the thesis. We did not agree on everything, and the thesis points to divergences in our views, but the discussions we had during 1980/81 helped me to crystalise my views on the social production of labour power in capitalism.

Simon Frith also attended my supervisions and gave incisive and valuable advice. His comments on the early papers I presented in supervisions were extremely useful and helped me to formulate my approach to the fieldwork studies. He gave me access to material produced with Kevin Buckley in their work with personnel managers in Coventry, which is used extensively in Part Two of the thesis. I also had valuable conversations with Kevin Buckley who alerted me to some of the problems of interviewing engineering employers in small firms.

Christine Pegler designed and drew some of the figures and tables in Appendix 4. The Contents to that Appendix indicates which figures these were. These figures and tables derived from work Christine Pegler and I carried out whilst working for the Coventry Education Department Programme Development Group, where we undertook research into the structure of the Coventry youth labour market during 1983.

The thesis, in particular Chapter Five on the youth labour market in Coventry, would not have attained its eventual form had I not worked as Research Officer (MSC Programmes) in the Coventry Education Department from 1982-85. This gave me access to material not readily available to researchers.

Especial thanks must go to the staff and supervisors at Midland Group Training Services for putting up with me during the 1980/81 training year and allowing me to interview their apprentices on the shopfloor. The apprentices also readily gave their co-operation in the shopfloor interviews and were generally open and supportive towards the research.

I would also like to thank all those engineering employers who became part of the Coventry Engineering Employers' Study - the main fieldwork study of the thesis. I hope the pseudonyms I have chosen for their firms are not too embarrassing.

Roger Gilbert, Training Executive of the Coventry & District Engineering Employers Association, was very supportive and helpful in terms of providing background information about the formation of Midland Group Training Services and for guiding me through the pertinent issues in the local debates on numeracy and engineering apprenticeships in Coventry. He also helped me gain access to interview Midland Group Training Services' first year apprentices.

Archivists in the University of Warwick Modern Records Centre, particularly Alistair Tough, were invaluable guides to the Confederation of Shipbuilding and Engineering Unions' and Amalgamated Union of Engineering Workers' archives on apprentice training and recruitment. Staff in the Coventry Local Studies Centre were extremely helpful in suggesting what material on education in Coventry might be useful and it was through the Chief Archivist at the Centre that I first discovered that members of the public could view the Registrations for Freedomship at the Lord Mayor's Secretariat. A study of these Registrations provided me with data on traditional indentured apprenticeships in Coventry.

Two people in particular provided tremendous advice, encouragement and support. Discussions with Ruth Richards helped me to clarify key concepts developed in Chapters Two and Six. She typed out early drafts of the thesis. During 1987/88 she provided essential financial support as I worked part-time in order to complete the thesis. Peter Fairbrother, my supervisor, gave sustained advice, constructive criticism and support - both in terms of the research and the production of the thesis. On the fieldwork studies in particular he curbed my natural talent for overambition and pointed out the practical implications of the research programme I originally submitted. His perceptive comments on the early research papers I produced and my original plans for research inclined me to at least attempt the possible. He gave valuable support to my attempts to theorise recruitment and labour power in new ways. His theoretical, empirical and stylistic criticisms of various drafts of the thesis were invaluable. I am tempted to blame any remaining defects and errors in the thesis on Amstrad plc - but they are, after all, my own.

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LIST OF ABBREVIATIONS AND ACRONYMS USED IN THE THESIS

APAC	Association of Patternmakers and Allied Craftsmen
ATC	Air Training Corps
AUEW	Amalgamated Union of Engineering Workers
BACIE	British Association for Industrial and Commercial Education
CBI	Confederation of British Industry
CCS	Coventry Careers Service
CDEEA	Coventry & District Engineering Employers' Association
CEES	Coventry Engineering Employers' Study
CET	'Coventry Evening Telegraph'
CME	'Central Midlands Enterprise'
CNC	Computerised Numerical Control (machine tools)
CPVE	Certificate of Pre-Vocational Education
CRC	Community Relations Council
CRE	Commission for Racial Equality
CSE	Certificate of Secondary Education
CSEU	Confederation of Shipbuilding and Engineering Unions
CTCs	City Technology Colleges
CYP	Coventry Youth Programme
DES	Department of Education and Science
DoE	Department of Employment
EEF	Engineering Employers' Federation
EITB	Engineering Industry Training Board
EOC	Equal Opportunities Commission
FBI	Federation of British Industries
F.E.	Further Education
GCE	General Certificate of Education
GCSE	General Certificate of Secondary Education
GSP	Government Sponsored Programmes
GTS	Group Training Scheme
HND	Higher National Diploma
ITO	Institution of Training Officers
LEA	Local Education Authority

LIST OF ABBREVIATIONS AND ACRONYMS USED IN THE THESIS (Continued)

MGTS	Midland Group Training Services
MSC	Manpower Services Commission
N/C	Numerical Control (machine tools)
NIIP	National Institute of Industrial Psychology
OECD	Organisation for Economic Co-operation and Development
OND	Ordinary National Diploma
ROSLA	Raising of the School Leaving Age
SIC	Standard Industrial Classification
SPE	Seeking Permanent Employment
T.D.	Technical Drawing
TEC	Technician Education Council
TES	'Times Educational Supplement'
TTWA	Travel-to-Work Area
TVEI	Technical and Vocational Education Initiative
WEEP	Work Experience on Employers' Premises
YOP	Youth Opportunities Programme
YTS	Youth Training Scheme

INTRODUCTION: THE CENTRAL CONCERNS OF THE THESIS(i) The Main Concern: The Needs of Industry and Labour Power

The thesis starts from a concern with research into and the concept of the 'needs of industry'. Researchers argue that employers are basically confused or ignorant of their own needs, or that statements of their needs contain contradictions. The thesis examines these needs and whether and why they appear to be contradictory, within the context of recruitment to engineering apprenticeships. The Coventry Engineering Employers' Study (CEES) - a study of the recruitment of engineering apprentices in 107 firms - is the means whereby these goals are pursued. Recruitment is studied as employers are forced there, to some extent, to think about and define their needs in relation to young people they recruit.

The main theoretical argument is that the contradictions within employers' statements about their needs flow, not from their ignorance of what these are, their confused state of mind or their inability to spot contradictions, but from the fact that these needs reflect contradictions within labour power. The contradictions between aspects of labour power are reflected in employers' statements of their needs. Employers are not confused about their needs; rather the nature of labour power, with its contradictory aspects, forces employers to conceive of their needs in a contradictory manner. These contradictions are not immediately apparent in statements of needs.

Indeed, the empirical work shows that employers have coherent conceptions of their needs in terms of attributes sought in applicants. Also, their methods of recruitment closely reflect the importance of the main classes of criteria. Yet when the criteria and methods of recruitment are examined in the light of the recruitment channels used - the ways in which applicants and recruiters are brought together - then inconsistencies in the behaviour of CEES employers become apparent. At this point the recruitment process becomes anarchic in terms of the employers' labour power policies as for some applicants, (sons/relatives/friends of employees/employers /clients and customers), there is preferment, and formal criteria are ignored to

varying degrees. On the other hand for young women, and to a lesser extent for young blacks, the criteria sometimes become inoperative and they are shunned whatever the quality of their work attitudes, qualifications and other attributes. This summarises the empirical argument of the thesis. The major conclusion is that employers' statements about their needs are contradictory first of all because they reflect the contradictions of labour power itself, and secondly that they appear contradictory in relation to what they actually do in the recruitment process through dumping their own stated needs in relation to certain groups of applicants. There is also a deeper conceptual confusion within the concept of needs of industry itself. This confusion is at the centre of the main conceptual argument of the thesis.

Employers have all kinds of needs. In recent years sociologists have paid little attention to the concept of needs of industry. They continue to use it freely in their work. The needs that the concept 'needs of industry' refer to are labour power needs it is argued. Labour power needs can be specified in terms of the attributes of labour power. These can be characterised as first of all the constituent items (the qualities, competences) of labour power. They can also be socially produced within labour power. Thirdly, they are assessed in recruitment; applicants are scrutinised as to whether they possess these attributes and to what extent. The quality of specific attributes within labour power is assessed. Employers' statements concerning their needs are specifications of labour power attributes above all else. But in practice employers rarely make the distinction between the three perspectives on labour power attributes.

However, the notion of needs in relation to labour power is inappropriate; it violates the nature of labour power itself. Labour power is an essentially fluid, unbounded phenomena, and when the capitalist buys labour power s/he buys an unknown quantity. Unless s/he has socially produced the labour power s/he is also uncertain about its quality. The recruitment process partly plays the role of cutting down uncertainty on the quality of new recruits. Ultimately the concept of the needs of industry is incoherent as these needs cannot be specified in terms of the quality of labour power

attributes to be utilised in the labour process, socially produced or assessed in recruitment. The quality of labour power attributes is crucial to employers as, if they can raise the quality of these within the labour power at their disposal, they gain a competitive edge. But they are never satisfied with any given level of quality of labour power attributes. It makes no sense, (in capitalist terms), to argue that they could be satisfied as the higher the quality of their labour power then, ceteris paribus, the more surplus value is created as labour power performs more efficiently in the labour process. Thus, given that the upper limit of the quality of labour power attributes cannot be specified, to talk in terms of labour power 'needs' being met is nonsensical as such a notion demands that there be a point where employers would say that the quality of their labour power, the quality of the attributes of this labour power, was 'good enough'. From a capitalist viewpoint it is nonsensical to say this as it entails giving up the competitive struggle to raise the quality of labour power and hence raise the level of surplus value. Complacent employers satisfied with the quality of their labour power would find themselves at a self-imposed competitive disadvantage. The concept 'needs of industry' is nonsensical in capitalist terms. The irony is that employers are particularly fond of using it. The surprising thing is that researchers and theorists in sociology are equally fond of using it in a way which fails to reveal its essential incoherence.

The main concern of the thesis is with demystifying the needs of industry, but through the empirical and theoretical work pursued in relation to this goal five other subsidiary concerns emerge. The following sections examine these five concerns. Together with this section they provide a map to the major issues, arguments and problems encountered in the thesis.

(ii) The Importance of Work Attitudes

'The starting point must be the question: What is an employer looking for in a man when he hires him?' (Musgrave:1967,pp18-19).

The recruitment process is the social site where employers are forced to

some extent, to define the attributes sought in applicants for jobs, and assess applicants in the light of these attributes. The CEES is a study of the attributes sought in applicants, recruitment criteria, and methods and channels of recruitment used by engineering employers in the recruitment of craft and technician apprentices. The main focus is on the attributes sought in applicants in recruitment.

One finding attains an overwhelming presence in the CEES and demands especial attention and explanation. Work attitudes is the most important category of attributes sought in applicants in the CEES. For craft, work attitudes assume a massive importance. Specific work attitudes are especially significant for craft recruitment. Specific work attitudes are engineering-oriented work attitudes. The key specific work attitude in relation to craft is interest in engineering, and this is followed by interest in the job and the trade. CEES employers are very concerned about getting craft applicants with a genuine interest in engineering, the trade or the specific job. Evidence from the CEES, but also from my Apprentices' Study, involving shopfloor interviews with first year engineering apprentices, points to a crisis of interest in engineering amongst craft applicants. There is a partial explanation of this phenomenon through reference to the structure of the youth labour market in Coventry.

Chapter Five suggests that the constricted youth labour market in Coventry, with its heavy reliance on manufacturing jobs, and within manufacturing, a concentration of engineering jobs - engenders a crisis of interest in engineering. Youth in Coventry have a very narrow range of work options open to them. Engineering jobs present the best chance of obtaining work of any kind at all, and engineering apprenticeships held up well to 1980-81. Chapter Twelve shows that young males seeking any job rather than none, or preferring any job to going onto the burgeoning Youth Opportunities Programme in the City, are likely to see engineering craft apprenticeships (with at least four years relative job security) as the most viable option. Young people in the City know Coventry is an engineering town - there are factories in most areas of the City, and these include some world famous names. In the circumstances of the early 1980s it was inevitable that some

would go into engineering apprenticeships even though they were not interested in engineering; particularly for craft apprenticeships where qualifications demanded were relatively low (sometimes non-existent) and where acceptance on a day-release course did not require qualifications.

The structure of the youth labour market goes some way to explaining the crisis of interest in engineering in relation to craft applicants in Coventry, and in turn plays a part in the explanation of the importance of work attitudes overall, but there is more to the dominance of work attitudes than this. Work attitudes is the most important category of attributes sought by employers in almost all other studies researching the criteria of recruitment. These studies survey a variety of youth labour markets at different skill levels. Thus, the dominance of work attitudes is a general phenomenon, not something purely the result of the nature of the Coventry youth labour market. Reference to the structure of the Coventry youth labour market does not explain the importance of general non-specific work attitudes, work attitudes not related to engineering. The general dominance of work attitudes has to be explained. Unfortunately, researchers and writers within the 'transition from school to work' do not try to explain it. There is a kind of 'stand back in amazement' attitude within the literature, where the centrality of work attitudes is pointed out as though it is in itself some revelation, requiring no further explanation. It is argued that an understanding of the dominance of work attitudes can be gained by an understanding of the nature of labour power and its social production. Furthermore, it is argued that work attitudes are crucial both in the labour process and in terms of labour power being socially produced.

(iii) A Curious Set of Findings

Work attitudes is the most important category of attributes sought in applicants in the CEES. But when CEES employers are asked what schools can do to more adequately prepare youth for apprenticeships in their firms there is less concern with work attitudes. Learned skills, especially the 3Rs, assume the greatest importance. In terms of what CEES employers look for in

applicants for apprenticeships these learned skills take up a small proportion of the references, although qualifications - partly a measure of literacy and numeracy skills - is the third most important category of attributes sought in applicants.

This curious set of findings is given another twist through the fact that in certain circumstances employers take on young people who are not up to their requirements regarding the 3Rs. Some young people - the sons of employers, directors, managers and skilled employees - are taken on almost regardless of their literacy and numeracy skills or qualifications. The attributes generally sought in applicants are dumped for these privileged youth. On the one hand CEES employers argue that schools should concentrate more on the 3Rs, but on the other they recruit certain young people without regard to ability in the 3Rs. The picture becomes more complex given the fact that there is a group of employers who give apprenticeships to young people who do not meet stipulated qualifications but whose work attitudes are deemed to be particularly good.

Furthermore, the CEES shows that some employers keep young women out of engineering apprenticeships, and to a lesser extent young blacks, whatever their qualifications, learned skills or work attitudes are like. Young women in particular are discriminated against, especially for craft apprenticeships. There is also evidence of discrimination against youth from 'broken homes', and single parent families. Whilst some categories of applicants are given favour, others are discriminated against. The employers' ability to do this rests on their control of the recruitment process. Part Four of the thesis examines the issues surrounding the control of the recruitment process. Parts Two-Four centre around the curious set of findings outlined above, especially explanations of aspects of this set of findings, the inconsistencies and dual standards, the way the goal posts shift for different types of applicant, and the gap between demands directed at schools and CEES employers' statements of attributes sought in applicants.

In terms of the stated attributes sought in applicants, labour power

attributes dominate, both in terms of the most important attributes, and also in terms of the number of attributes recorded. This is a predictable finding. Leaving aside crucial ascriptive criteria such as sex and race, which operate in a covert way, it is reasonable to expect that the formally stated attributes will be largely related to performance in the labour process. Labour power attributes is not the only category of attributes CEES employers operationalise as recruitment criteria. But it is the dominant category in CEES employers' statements of attributes sought in applicants.

The empirical work in the CEES reveals apparent contradictions between recruiting to the individual firm and the engineering industry as a whole. The former dominates, but the latter plays a role in relation to certain key attributes sought in applicants. However, these contradictions are apparent rather than real. It is argued that CEES employers recruit with their own labour processes in view on the whole. They recruit from the point of view of their own individual capitals, and not for the engineering industry as a whole. From this situation a need to theorise the relationships between various types of labour power attributes as they relate to capital arises. This in turn revolves around an understanding of aspects of the relations between categories of capital.

(iv) Theorising Labour Power Needs: Criticisms of the Current Literature

Unfortunately, the current literature is not very helpful on these points. Since the early 1980s, it is argued, there has been a drift away from a concern with critically analysing labour power needs, typically referred to as the 'needs of industry'. This has gone hand-in-hand with a retreat from the labour process within work on the transition from school to work.

Chapter One illustrates these trends within the transition from school to work through a partial literature review. It shows how the transition from school to work is currently being split into new disciplines within sociology. It also shows that the failure to adequately theorise the needs of industry as essentially labour power needs in the early 1980s, when attention was given to the issue, results in serious theoretical errors -

both in the early 1980s, and more recently when theoretical work on the needs of industry has ceased altogether. The main error is that various writers skip from the labour power needs of individual capital to sectors of capital and capital in general within theory and explanation as though this does not matter. Chapter Seven shows why it does matter.

(v) The Nature of the Recruitment Process and The Criteria of Recruitment

It is argued that the recruitment process is not just about finding the most suitable young person in terms of criteria relating to attributes of labour power. What happens in the recruitment process for any type of youth labour, and adult labour, is not just regulated by the labour process, the needs of industry in popular parlance. The criteria of recruitment flow from a number of sources. The nature of the recruitment process itself requires examination. This section points to certain distinctions through which the recruitment process and the criteria of recruitment in relation to youth can be understood. Chapter One shows that sociologists working within the 'transition from school to work' do not make these distinctions.

The curious set of findings outlined earlier can be partly explained with reference to the nature of the recruitment process for school leavers. The recruitment process here is a complicated phenomenon, even more complicated in the case of recruitment to skilled work - for reasons explained below. It is argued that the criteria of recruitment are determined by a number of considerations in relation to school leavers.

Firstly, the criteria of recruitment include reference to labour power attributes. Two aspects are involved here. There are the labour power attributes flowing from the particular job, and secondly those flowing from the whole labour process - together the attributes of labour power required for efficient performance of work tasks in the labour process. These attributes are defined by employers at the point of recruitment; the criteria of recruitment are partly a result of this process of definition on the part of the employer. But as the employer may not know all the details of the attributes of labour power flowing from the labour process, her/his

definition of the attributes of labour power at the point of recruitment, where s/he has to give them some thought, may not coincide with the former. It shall be seen that some recruiters of engineering apprentices are ignorant of some of the mathematical skills required of craftsmen in their labour processes. Yet the labour process regulates employers' specifications of labour power attributes at the point of recruitment to varying degrees.

There are other groups of criteria at work in the recruitment of school leavers. Labour power attributes are inscribed within the criteria of recruitment but there are other types of criteria too. The criteria of recruitment also contain education effects. This is of particular importance for the recruitment of young skilled workers such as engineering apprentices. Employers may give some regard to what is required by educational institutions. Colleges of further education are important in the case of engineering apprentices, especially technicians, where entry to the various levels of Technician Education Council (TEC) courses is determined partly by qualifications. For qualifications, employers partly recruit not just on what they require, but also on what the college requires.

The criteria of recruitment are also the result of the general incidence of racism and sexism in British society and their supporting ideologies. In some firms these considerations become paramount in the CEES; there is total exclusion of young women from apprenticeships in engineering. Sex and race as criteria of recruitment operate clearest in firms where there are no professional training and personnel staff involved in recruitment - that is, small firms. Such staff are most common in the larger CEES firms where there is often a paper commitment to equal opportunities, and where their professional ethics and training predisposes them to be more aware of equal opportunities issues than harassed works managers in small firms who deal with apprentice recruitment as just one more item on their long list of duties. Sex and race figure as hidden and unstated criteria in the CEES.

Certain circumstantial elements also enter as recruitment criteria in the CEES. Circumstantial elements are factors in recruitment which are not ascriptive in relation to applicants, but are nevertheless a matter of

circumstance - a certain situation that applicants for jobs find themselves in at the point of recruitment. For example, the fact that an applicant's father works in engineering, and factors such as the travel to work distance and the availability of public transport between the applicant's home and the potential workplace are all factors that the young applicant has little control over, and depend on circumstances prior to application.

The recruitment criteria also include reference to certain facts of the reproduction of labour power, (as opposed to the social production of labour power). The quality of upbringing is judged. When a school leaver goes for a job the quality of his family life may also figure in the criteria governing recruitment. This point is examined in Chapter Eleven. The stability of family life, especially parental support through the apprenticeship, is seen as important by the CEES employers.

Finally, the formal criteria of recruitment may be overturned for certain favoured individuals - employees' sons, sons of friends, clients, customers, or sons of directors, managers or owners - and school leavers may be recruited according to who they are rather than the particular attributes they possess. An alternative recruitment strategy takes over, dependent on the social power of the recruiter.

The criteria of recruitment consist of a number of different types of criteria which have specific determinations and which can be empirically difficult to separate. Recruitment criteria for school leavers are the outcome of a complex set of factors. Given this situation it is no surprise that inconsistencies and dual standards emerge. The criteria of recruitment are not just framed with reference to labour power attributes. The recruitment process in relation to school leavers is not just about selecting out the best available young people defined in terms of a set of desired attributes which flow from the requirements of the labour process.

Furthermore, the recruitment process for school leavers has been misunderstood in another sense. What has not been grasped is that it is located within, but is not part of, the social production of labour power. The recruitment of school leavers comes at a point before labour power has

been socially produced; only the first part of the process, general education, has taken place. The social location of the recruitment process itself has to be understood. This affects the criteria of recruitment and creates the education effects referred to above.

(vi) The Social Production of Labour Power in Capitalism

The social location of recruitment can be appreciated with reference to the uncovering of the social production of labour power in capitalism. To grasp this it is essential to go into what the social production of labour power is. The specification of the social production of labour power occurs in Chapter Two. It is differentiated from other social processes with which it has been confused by other writers. The social production of labour power is concerned with the processes involved in producing labour power as a commodity, fixing the attributes of labour power within potential labourers and developing physical attributes. The fragmented forms in which labour power is produced in capitalism, with its institutional splits, (into schooling, on/off-the-job training, further and higher education, character and attitude training, the development of abilities in the labour process, and now the Youth Training Scheme), makes for great difficulties - theoretical and in terms of empirical work.

It is argued that the importance of qualifications stems mainly from the fact that the first part of the social production of labour power, general education, is not under the direct control of individual capitals. Thus, employers have to use methods of recruitment which attempt to ascertain how successfully schools have undertaken general education with reference to labour power attributes sought in applicants. Explanations of why individual capitals do not control general education in modern capitalism and why the social production of labour power is a fragmented process are not given for two reasons. First, the thesis is concerned primarily with the process of **definition** of the labour power attributes to be socially produced and the ways in which employers assess the extent to which they have already been partially socially produced - not with the production of these attributes.

Hence the focus on the recruitment process, where labour power attributes are defined, specified and assessed. Secondly, preliminary work on the social production of labour power carried out independently of this thesis makes it clear that to elaborate this social process and the contradictions inherent to it would involve writing an additional thesis. The dilemma arising here is to give enough information on what the social production of labour power basically is without going into explanations of its fragmented nature and the contradictions within it which force its constituent elements apart. But it is important to give an outline of these elements as it facilitates an understanding of both the social location of recruitment and certain attributes sought in applicants and other recruitment criteria.

In particular, it is argued that the importance of work attitudes, and also personality traits, as attributes sought in applicants, partly flows from two important facts. There is general underdevelopment of certain aspects of the social production of labour power in modern Britain - the lack of investment and resources put into overt attitude training and personality development. This in turn is explained through the central contradiction within the social production of labour power in capitalism; the attempt to objectify and fix work attitudes and personality traits as attributes of labour power which is the subjective element in the labour process.

These are the six major concerns of the thesis. In Chapter One the major of these concerns, the needs of industry, is examined through a literature review. This review highlights the way in which previous commentators and analysts have misconceived the essential issues at stake in the analysis of the needs of industry and how, to all practical intents, analysis of the concept has ended, and why this has happened. However, prior to starting the thesis proper, a brief account of the overall structure of the thesis is given in terms of the contents of its five Parts.

THE STRUCTURE OF THE THESIS

The Introduction outlined the six main concerns of the thesis. However, the thesis is not presented strictly in the order of the sections as they appear in the Introduction. If it was, it would hamper understanding of key arguments. The uncovering of the social production of labour power comes early, in Chapter Two, enabling reference to it to proceed throughout the whole of the empirical Parts Two-Four of the thesis. Shortcomings in the literature are also cleared away at an early point. The actual course of the presentation of the thesis is briefly described below. The thesis is divided into five Parts. These Parts encompass particular themes. The aim here is to pinpoint the themes and issues within each Part of the thesis.

Part One lays the foundations of the thesis in five respects. First, there is a clearing away of certain confusions within the literature on the transition from school to work and a focus on key issues within the literature that are taken up by the thesis (Chapter 1). Next comes an elaboration of the social production of labour power - a key element of the theoretical development within the whole thesis (Chapter 2). There is then a step backwards to the original motivations, concerns and issues which stimulated the empirical research (Chapter 3). The empirical research undertaken, the fieldwork studies, are then described (Chapter 4). Finally, the context in which the research takes place, the structure and state of the youth labour market in Coventry, is set out (Chapter 5), providing the reader with the requisite background knowledge for an appreciation of Part Two.

Part Two addresses four main issues: the attributes sought in applicants for engineering apprenticeships in engineering in particular and recruitment criteria in general; explanations of the importance of the dominant class of attributes sought in applicants (work attitudes); an explication of the aspects of labour power and the ways in which they give rise to contradictions within the attributes sought in applicants; and a critique of the concept of needs of industry. Part Two is also the empirical core of the thesis. The whole Part draws heavily on the CEES. Whilst nearly all the

chapters, (Chapters 6, and 8-12) are set around the attributes sought in applicants for engineering apprenticeships and certain recruitment criteria revealed by the CEES, there is also analysis of pertinent findings and insights from the research and commentary of other sociologists. The theoretical and empirical questions involved in the relation between the criteria of recruitment in general and the labour power attributes of various categories of capital are also pursued (Chapter 7). The critique of the concept of 'needs of industry' is also given in Chapter Seven. Chapters Six-Eight develop arguments about the nature of labour power and three of its fundamental aspects, the subjective, use value and exchange value aspects of labour power, and show how they are reflected in attributes sought in applicants. With Chapter Two, these chapters are the main theoretical chapters of the thesis. The theory and conceptual development in these chapters is worked out through the analysis of the empirical material of the CEES. This is why separate theoretical chapters are not provided for the analysis of aspects of labour power.

Part Three takes in three main themes. The main emphasis is on the methods of recruitment, the ways in which the attributes sought in recruitment are assessed in relation to particular applicants and the relation between recruitment methods and criteria (Chapters 13-14). But Part Three starts from an issue thrown up by Part Two; the crisis of interest in engineering, especially amongst craft applicants. The opening (Chapter 12) explains why this crisis exists. This discussion takes place in relation to the Apprentices' Study (research into the recruitment of engineering apprentices based on the accounts of apprentices themselves), a discussion of other research carried out in Coventry on the work attitudes of youth, and the significance of the structure of the Coventry youth labour market in engendering a crisis of interest in engineering amongst school leavers in Coventry. The third concern is what employers in the Coventry Engineering Employers' Study believed schools could do to more adequately prepare young people for apprenticeships in their firms (Chapter 15).

Part Four has one main theme; issues surrounding the control of recruitment. It is shown why maximum control of the recruitment process in relation to

apprentice recruitment was so crucial for the employers in the Coventry Engineering Employers' Study (Chapters 16-22). In addition there are four subsidiary concerns which all relate to the dominant issue of control in Part Four: the relation between the criteria, methods and channels of recruitment; discrimination in recruitment; the collective aspect of labour power; and the anarchic nature of the recruitment process from the perspective of labour power policy. But the main theme is the variety of ways by which engineering employers in the CEES attempt to maximise control over some aspects of the recruitment process and circumnavigate other aspects. The former are invariably aspects internal to the firm, aspects that the employers have some direct jurisdiction over. The latter are mainly external forces such as the Careers Service. There are also attempts to control the flow of applicants, the quantity of applicants and the quality of applicants. In short, there are various attempts to maximise control over the workings of the youth labour market in Coventry at the point at which it impinges directly on the priorities of the individual firm. This is attempted for a variety of ends which are examined in detail.

Part Four shows the anarchic relation between attributes sought in applicants, the criteria, methods and channels of recruitment. Part Two argued that attributes sought in applicants were framed with reference to the labour process concerned. Part Three argued that, in general, recruitment methods were consonant with attributes sought in applicants and the formal criteria. But in Part Four, when the focus shifts to recruitment channels - the means by which recruiters and applicants are brought together - and the relation between these and methods, attributes sought and criteria is examined, the anarchy of employers' decisions and strategies becomes apparent. Employers make decisions which run counter to their interests regarding the quality of their labour power. The explanations as to why they do this reveal the social power of employers in the recruitment process, the importance of maximising control of recruitment and the wider considerations which give their anarchic labour power strategies some raison de etre. Part Four shows in particular that it was crucial for employers to control the recruitment process, not just in terms of their labour power strategies, but

for wider goals, including the maintenance of work discipline, enhancing relations between clients and customers and as a refuge from the harsh youth labour market conditions for their own offspring. It is shown that these latter considerations sometimes gain precedence over labour power strategies in recruitment. This creates anarchy within these strategies.

Discrimination is also an important theme, both in terms of positive discrimination through giving preferment to relatives and friends of employees/employers/clients/customers (Chapters 16,21), but also negative discrimination, keeping girls and young blacks out (Chapter 22). A recent explanation of the latter given by Hohn (1988) is examined (Chapter 22) and this analysis reveals the importance of the collective aspect of labour power - the extent of integration and co-operation between individual labour powers of the collective labour power within a capital.

Difficulties arose with Part Four from the fact that the original fieldwork was not designed to primarily research issues surrounding the control of recruitment. Only after the fieldwork was under way and as the more theoretical work progressed did it become clear that control issues, the ways and extent to which employers controlled recruitment, affected both recruitment procedures and ultimately their criteria of recruitment.

Part Five summarises the main arguments of the thesis, discusses underdeveloped aspects and states the main conclusions. First, there is a summary of the argument arising from the empirical work. The implications of this argument are drawn out and suggestions are made for future research which would extend the concerns of the thesis (Chapter 23). Secondly, the main arguments and conclusions of the thesis are summarised (Chapter 24).

Finally, the relationships between the three empirical parts of the thesis should be made explicit. Part Two concentrates on attributes sought in applicants and recruitment criteria. Part Three focusses on the relation between these and recruitment methods. Part Four focusses on the relation between attributes sought, recruitment criteria, recruitment methods and recruitment channels. The analysis gradually becomes more complex empirically.

P A R T O N E

[REVIEW AND DEVELOPMENT, INITIAL CONCERNS, METHODS
AND STRATEGY AND THE CONTEXT OF THE RESEARCH]

The Needs of Industry; The Social Production of Labour Power; Initial
Concerns, Original Motivations; The Fieldwork Studies Described, Research
Methods, Midland Group Training Services; The Coventry Youth Labour Market.

* * * * *

Chapter OneTHEORISING THE NEEDS OF INDUSTRY - A CRITICAL REVIEW(i) Introduction

In this chapter it is argued that the analysis of the needs of industry carried out in the late 1970s and early 1980s was inadequate. Theorists and researchers pointed to the contradictions within employers' statements of their needs but failed to explain their origins. In recent years there has been a drift away from analysis of the needs of industry. This has proceeded hand-in-hand with a drift away from a concern with the labour process in work on the transition from school to work.

Explanations of this drift away from critical analysis of the needs of industry and the labour process is examined through an analysis of trends within the field of the transition from school to work over the last decade. It is the nearest the thesis gets to a literature review, although it is not a comprehensive one. This is because the review is concerned with trends within Marxist theory and research in this field. It is a partial review, deriving from a concern with the development of Marxism. The literature is examined through a focus on the needs of industry and the relationship between the labour process and schooling. From this perspective it points out confusions within the literature. These centre around the ways in which various writers have attempted to theorise the needs of industry. This paves the way for Chapter Two, which puts the analysis of the needs of industry on a firmer foundation. It is a partial review in another sense. What might be conveniently labelled the traditional debate within the 'transition from school to work' has been largely ignored as it does not immediately connect with the analysis of the needs of industry. This traditional debate, stemming from the late 1950s, is centred around the question of the adjustment of youth to work - whether the movement of young people from school to work is a traumatic experience resulting from differences in values and normative expectations between the world of work and education (Bazalgette:1978), or if young people find the transition relatively

painless and rapidly assimilate into the work situation (Ashton and Field:1976; Paul:1979; West and Newton:1983). The traditional debate still ensues, but since the mid-1970s the focus has shifted to a group of concerns which are described in the following section. It is argued that this recent work provides a firmer empirical base for understanding employers' needs but has theoretical limitations.

(ii) Some Recent Trends in the Transition from School to Work

This review of trends within research and writing on the transition from school to work is not exhaustive, but it captures the dominant concerns of the last decade. These four concerns are, briefly: research into the youth labour market; the reactions of working class kids to schooling and how these affect the transition from school to work; youth unemployment and the interventions of the Manpower Services Commission (MSC); and work on what has been labelled the New Vocationalism. These dominant areas of study are not mutually exclusive in any sense. Writers and researchers sometimes take in more than one of these areas and show the interconnections between them. Brown (1987a) examines all of the four areas in a comprehensive analysis of the ways in which ordinary kids make the transition from school to work. These processes are obviously related in concrete social reality, thus, it is to the good when the connections are made in research and analysis.

There was a tremendous explosion in research into the youth labour market from the late 1970s and an increase in research and commentary on the labour market in general after the publication of Blackburn and Mann's (1979) influential work on the Peterborough labour market and the massive output on labour market segmentation since the early 1980s. Research specifically into the youth labour market received a significant boost from government funding. The Labour Market Studies Group at the University of Leicester received funding to explore three youth labour markets and the prolific spin-off work of members of this Group established the sociology of youth labour markets as a significant field of study. Ashton's output in particular has been colossal. The Department of the Environment has also

funded research into the youth labour market (Finn and Markall:1982b). The Leverhulme Trust, the William Temple Foundation, Youthaid and other non-governmental organisations have also funded and undertaken research into the youth labour market. The MSC and the Department of Employment (DoE) produced an increasing amount of information on the youth labour market through reports, research projects and the DoE 'Gazette'.

This work was sorely needed. There was a general lack of information on the working of labour markets in general, and especially youth labour markets, within the British context up to the late 1970s. Blackburn and Mann (1979) noted a neglect of empirical studies of the labour market that was truly 'remarkable' (p.3). However, recently Lee, Marsden, Hardy, Rickman and Masters (1987) have noted that this situation has been turned round, and that specifically on the youth labour market:

'There is an impressive body of research in the social sciences which has been concerned with the general characteristics of youth labour markets and their responsiveness to training and the employment policies of governments.' (p.139).

Much of this work was recently brought together in the excellent reader 'Education, Employment and Labour Markets' edited by Brown and Ashton (1987), where a great variety of youth labour markets were examined by the contributors. In their contribution, Ashton, Maguire and Spilsbury (1987) argued for a distinct sociology of the youth labour market, concerned with the effects of schooling and the family on the transition from school to work, the organisation of the labour market, occupational closure and the careers and position of women in the labour market (ibid.p.161). Excellent work has been produced on the youth labour market in recent years, but rather than arguing for a sociology of the youth labour market, as Ashton and his colleagues do, the way forward is to see what implications this work has for our understanding of other areas of capitalism. For example, Buswell (1986) correctly argued that the work being done on the labour market must be related to a reconsideration of the labour process. As Nash (1986) noted, labour market structures confront young people as they leave school and appear unalterable in their 'oppressive facticity' (p.172). However, these

structures are themselves:

'...largely the actions of others - largely, in fact, of individual employers acting in the interests of their firms.' (pp172-173).

These structures are ultimately the outcome of what happens in particular labour processes and the extent to which employers frame their needs for youth labour on the basis of the requirements of their particular labour processes. The labour process cannot be ignored; labour market structures are not autonomous. The new youth labour market sociologists ignore this point at their peril.^[1]

There has been considerable expansion of work in the area of how working class pupils react to schooling and the effects of this on how they make the transition from school to work. Differentiated responses are all the rage. Much of this work was a response to the seminal work of Willis (1977), who discovered two basic responses of working class pupils; the anti-school subculture created by the lads and the conformist response of the ear'oles.^[2] Others have subsequently expanded this demonology on the basis of the discovery of responses not accounted for in Willis. Jenkins (1983), for example, in his Belfast study of working class youth, discovered three different ways of becoming working class which could be related to responses to capitalist schooling. There were the lads (an exaggeration of the traditional working class), citizens (the respectable working class with upwardly mobile intentions and aspirations) and the rest, ordinary kids. Brown (1987a) also identified three orientations to school in his study of pupils in a South Wales town. Again, there were three central ways of becoming a working class pupil in school. Brown's pupils differentiated into the rems (who rejected school) the swots (who accepted the school) and the ordinary kids, the subjects of his study - the majority who neither reject or accept, but simply comply.^[3] Brown examines how the ordinary kids make the transition from school to work (or YTS). Apple (1985) points out a study by Everhard who discovered a cross between a Willis lad and a Willis ear'ole; the pupil who gets reasonable grades and goofs off (p.107). Again, there were essentially sound reasons for this work. Willis' overconcentration on the lads was clearly due for correction through

researching working class youth with other frames of reference.[4]

The significance of this work for Marxists remains unclear. The amount of ink spilt in analysing, criticising and saying what Willis' study was really about has been colossal. The discovery of further working class responses to schooling will no doubt fuel this area of work. The relevance of this work (largely Willis' in fact) for Marxists has been raised by Lauder, Freeman-Moir and Scott (1986). According to Lauder, Freeman-Moir and Scott, the importance of Willis' study for radical academics was that the lads seemed to be possible vehicles for radical change in a socialist direction. They were the new vanguard, superseding the student radicals of the late 1960s and early 1970s. If this was so it was an important discovery as:

'Now the charge against capitalism was to be led, not by middle-class college students, but by working-class youth.' (p.101).

Particular groups of working-class youth in fact. The problem with this analysis, according to Lauder, Freeman-Moir and Scott, is that Willis' lads seem more open to fascist politics, (with their 'looking after number one' attitudes, racism, sexism and anti-intellectualism), than socialism. Lauder, Freeman-Moir and Scott blame Willis for romanticising the lads and misreading his own evidence. There is something of 'searching for the vanguard' in Brown's work too, to the extent that he emphasises that the relative compliance of the ordinary kids rests on there being an adequate supply of the sorts of jobs that they consider worthwhile and worth making some effort at school for. Brown argues that as these jobs are disappearing then the real crisis of the classroom is coming to fruition. It will no longer be the case of a minority of lads rebelling against the norms and values of capitalist schooling, but the antagonism of the majority of working class pupils. Within some revolutionary groups the myopic search for the vanguard in British youth is more overt. The Revolutionary Communist Group (1984) for example, have made the identification and political development of the vanguard of British youth, (in their case black youth), an important part of their overall political strategy.

Work on youth unemployment and the interventions of the MSC through its

training and employment programmes for young people has mushroomed since the late 1970s. This reflected the fact that schemes such as the YOP and YTS took in an increasing proportion of school leavers from the late 1970s, which nurtured sociological interest in this field. School leavers were increasingly going onto schemes rather than into work. Research within the transition from school to work was forced by circumstances to shift its focus. Work on the experience of youth on these schemes, the effects of these schemes on youth pay and job substitution, the way in which social and life skills courses have superseded genuine social education, the health and safety of young people on these schemes, critiques of the course content of these schemes and assessment of the overall strategy of the MSC and government policy in this field was essential. This work has been brought together in a number of books: (Rees and Atkinson:1982; Dale:1985; Benn and Fairley:1986; Finn:1987).

More recently, increasing work has been carried out on what has been called the New Vocationalism. There has been disagreement about what this concept covers empirically. The growing consensus is that it centres around the Thatcherite attempts at tightening the bonds between education and industry through increasing the vocational element in the curricula of schools and colleges. The Technical and Vocational Education Initiative (TVEI) epitomizes this process. The disagreement lies in whether this process is basically about what is happening in schools or whether colleges and the Youth Training Scheme (YTS) are included. Brown (1987a), for example, defines it in terms of certain programmes (TVEI, the Certificate of Pre-vocational Education (CPVE) and the launch of the City Technology Centres (CTCs) - p.2) at one point, but then later switches the emphasis back squarely on the school (pp107-112). Moore (1987) has a more wideranging notion, defining the new vocationalism as 'an ideology of production regulating education' and includes what is happening in further education (F.E.) and MSC interventions in education and training, including YTS, as all being manifestations of this ideology. Moore argues that:

'...the new vocationalism should be seen in the first place as an ideology of production regulating education rather than as an educational ideology serving the interests of production or the social

control of unemployed youth.' (p.227)

There is something here of an alien ideology being imposed on education rather than an ideology originating within education.^[5] On what is to be included, empirically, within the new vocationalism Moore is eclectic. It covers TVEI, YTS, CPVE, the General Certificate of Secondary Education (GCSE) and MSC interventions in education in general. Moore describes the new vocationalism as:

'...a general movement towards an occupationalist integration between the educational system and the occupational system, mediated by a behavioural approach to skill training and supported by institutional arrangements which construct, legitimate and enforce new definitions of educational knowledge.' (p.228).

This comprehensive definition captures the broad sweep of developments and is preferable to a narrow focus on schools and TVEI. There were perfectly valid reasons for expanding work on the New Vocationalism. The increasing vocationalisation of the British education system was in need of description and critical analysis.

These four trends constitute what might be called the 'new transition from school to work', to differentiate it from the traditional transition from school to work outlined earlier. However, at least since the early 1980s, there has generally been one ingredient missing; the labour process. In the writing on the transition from school to work little has been said on the work end of the spectrum. Let us step back to a trail-blazing article by Frith - 'Education, Training and the Labour Process', (1980b).

There Frith tried to grasp the four elements described above (even the new vocationalism before it obtained its name) and integrate them into an overall analysis which included an analysis of the labour process and employers' needs. He attempted to integrate these elements theoretically. For a brief moment, he was followed in this enterprise by Finn and the Education Group. This theoretical orientation, of trying to understand the overall movement, from a Marxist position, was rapidly abandoned. Research and commentary on the four areas described above took off in a big way. The problem for Marxists is to make some overall assessment of this work and

relate it to political strategy, organisation and tactics. The poverty of theoretical development in the field of the transition from school to work does not help in this process. Theoretical development was virtually abandoned in the early 1980s. The kind of integration that Frith attempted is no longer in vogue, although individual theoretical points are still made. Again, this is understandable up to a point. Researchers and commentators have had a difficult task keeping up with developments as scheme after scheme comes and goes, initiatives abound, reports are churned out with increasing regularity and the radical Right proposes ever more mean, petty and exploitative plans for young people in Britain. Academic researchers have to respond to these developments, but it is difficult to see where an overall theoretical grasp of the situation is going to come from as the basis on which one could be built has been abandoned. It is difficult to see how a theoretical perspective on the overall process of transition to work can be attained without systematic reference to the work element. Relative neglect of the labour process has become increasingly inexcusable as work on it has developed rapidly since Frith (1980b).

When Frith wrote his (1980b) he used material from Marx, Braverman (1974), the Brighton Labour Process Group (1977) and Friedmann (1977a,b) in his analysis. His (1980b) was based on a paper originally written in 1977. But work on the labour process has advanced considerably since then. Since 1977 the work on the labour process within the Conference of Socialist Economists and its journal 'Capital & Class', the work of writers such as Elger, Littler, Wood and others has considerably developed the Labour Process Debate. An approach along the lines of Frith (1980b) would seem opportune at this juncture given this massive output.^[6]

Such a possibility seems increasingly unlikely. The labour process has been left to the labour process theorists and an increasing fragmentation appears to be taking hold through the formation of new disciplines and sub-disciplines. The aetiology and genesis of the new 'sociology of the youth labour market' described earlier is indicative of current trends. Besides the setting up of a new sociology of education, writers such as Gleeson (1986) can justifiably talk about a 'training perspective'(p.47) and argue

how it could be improved, with the implication that a sociology of youth training is on the agenda. Gleeson and Mardle (1980) flirted with a sociology of further education. Gleeson (1983) points to the existence of a Standing Conference on the Sociology of Further Education and outlines what this sub-discipline should be concerned with, arguing that until recently it was a neglected area of study. Whilst Lee (1983) argues that the 'relative institutional autonomy'(p.235) of further education is the stuff of the sociology of further education. Given all this, fragmentation rather than integration has seemed the likely outcome, almost since the point that Frith's (1980b) appeared. What was loosely dubbed the study of the transition from school to work in the early 1980s is breaking up into subject specialisms and research areas. In these circumstances it is likely that the limited theoretical developments that took place in the late 1970s and early 1980s, (with all the errors within them that we will examine later still intact) will remain limited. There is no unifying perspective.

Such fragmentation is a common feature of developments in social science as a number of writers have noted. Shaw (1975) has analysed the tendency towards fragmentation in academic social science most thoroughly. He argues that the production of knowledge in academic social science is:

'...basically the production of pseudo-commodities related to the career structure of teaching in higher education.' (p.51).

Shaw notes that the academic structure functions to preserve disciplinary divisions in a struggle of control over the production of social science knowledge. Such control is important as encroachments by practitioners of one discipline into the 'field' of another heighten ambiguities over such things as the receipt of funds for research and the hierarchical structure of rewards and authority. Thus, each discipline has its own standards (practical and ideological) which regulate the production of knowledge within its borders. Shaw notes the tendency for sub-divisions to form within each discipline. This plays a useful function. Up and coming individuals and groups can thus be accommodated within the structure of a discipline and increase its prestige and financial pulling power, especially if the new sub-divisions are deemed to be worth financial support by government.

Government finance, (and other forms of funding through foundations and charities into new topics of research), can aid this process. We saw an instance of this in the formation of the new sub-discipline of the sociology of the youth labour market. Once a new sub-discipline has been established then its leading lights come to guide the academic norms of what is acceptable within it.

Shaw adds that this process does not just rest on career structures and financial considerations but is aided and abetted by positivism in social science. It is a form of thought which allows and encourages narrowness and is hence suited to the perennial sub-division of disciplines. As Shaw concludes:

'Whatever social study is inspired by narrow pragmatic reasons, whether of a social-utilitarian kind or of an academic-careerist kind, it is almost certain that we shall find positivist assumptions at work.'(p.86).

Others have pointed to this general process within the sociology of education. Sharpe (1980) notes that subspecialisms have emerged within the sociology of education which have taken on a measure of autonomy from the main specialism. She gives a long list of these subspecialisms, noting that it is not exhaustive (p.5). Given this state of affairs then:

'The central theoretical and substantive problems are dissipated through an ever-increasing fragmentation into their alleged component parts around which professional experts cluster with their vested interests in defining educational problems in their own, often trivial terms.'(ibid.).

Lauder, Freeman-Moir and Scott (1986) pose the fragmentation of knowledge within the sociology of education into subspecialisms within the context of a critique of positivism similar to Shaw. The importance of this analysis of academic fragmentation is that with the rising importance of the transition from school to work as a topic of study since the 1970s, breaking away from the narrow concerns of the traditional problematic outlined earlier, such fragmentation was a problem as specialisms and subspecialisms within sociology, (in particular sociology of work and sociology of education), as it was constituted, appeared as barriers to an understanding of this

process. The study of the transition from school to work implicitly challenged the split between sociology of education and work. Hextall and Sarup noted the key point here as early as 1977:

'...the attempt to explore the articulation between education and the occupational sphere continues to operate with a notion of the legitimacy and appropriateness of treating these as separate features of the social world.' (1977, p.152).

What has happened since is that the separateness of the sociologies of work and education has been maintained and what was commonly referred to as the transition from school to work in the 1970s and early 1980s is in the process of being broken up into new subspecialisms. Writers do not refer much to the transition from school to work nowadays in tacit acknowledgement of this.

But this subspecialism and endless division does not rest on thin air. As can be observed when trying to articulate the relationships between schooling, training, labour market and labour process, these processes are, in fact institutionally split.^[7] The divisions within the field of the transition from school to work and the division between the sociologies of education and work reflect real institutional divisions. The fragmentation of social knowledge can only proceed along the basis of these apparent and actual divisions within modern society. It cannot go exactly according to where innovators in social science try to drive it. The fragmentation of social knowledge must maintain credibility at the empirical level.

Shaw's account rests far too much on institutional processes within the academy, as does that of Lauder, Freeman-Moir and Scott. The important point to grasp is that social processes in capitalism are highly fragmented ones. Insofar as social science merely reflects these processes fragmentation will be inherent. The social bases of these many fragmentations must be uncovered. This is work for another thesis, or future work (Chapter 24).

This section has illustrated the way in which the dominant concerns within the transition from school to work since the mid-1970s have not provided the integrative framework within which theoretical development can take place. Rather, new subject specialisms are in the process of emerging from the

transition from school to work; fragmentation is in full flow. The labour process has been neglected; recent work on the transition from school to work has not given much regard to the work aspect, (which ironically, is present in the traditional debate in the transition from school to work). This retreat from the labour process within the new transition from school to work has gone hand-in-hand with a retreat from a concern with theoretical development and conceptual criticism of the needs of industry. The critical attitude towards the relationship between schooling and industry and the question of the needs of industry has evaporated since the early 1980s. The next section illustrates this critical attitude with reference to two articles from 1978.

(iii) The Needs of Industry: Letting Employers Off the Hook

In the late 1970s and early 1980s there was a healthy scepticism in work on the relationship between schooling and industry on the question of the needs of industry. At a time when schools and school leavers were being castigated by employers and their representatives for failing to meet the requirements of industry to an extent unprecedented since the 1930s, critical voices from the Left raised doubts about the extent to which employers really knew what they were talking about when they referred to their needs. Today this scepticism takes a largely token form. Unlike the late 1970s and early 1980s, there are few constructive suggestions from the Left as to how the rhetoric of employers' needs might be appropriated and subjected to critical analysis. Meanwhile, education and training in Britain are being restructured at an increasingly dizzying pace - and the justification for each element of this restructuring typically rests on some notion of British industrial needs. In abandoning critical analysis of employers' needs the Left has made it easier for the Conservative government to increasingly vocationalise British schooling and to justify schemes such as YTS and TVEI.

In 1978 two articles appeared which epitomized the healthy scepticism towards employers' needs referred to above. Edgley (1978) pushed the notion of tying education to industrial needs to its absurd limits. Using

Braverman's (1974) deskilling thesis and the work of American writers on automation, Edgley questioned the proposition that new automated technology required generally higher educational standards. Insofar as the deskilling thesis was true, then educational standards needed to be lower for the great mass of young people. He pointed to the boredom, meaninglessness and alienation involved in working in capitalist labour processes. The implication of Edgley's analysis was that when industrialists pointed to the schools to increase their standards or blamed school leavers for not having the right skills (which Edgley pointed out was essentially a demand for better work attitudes and discipline) then those interested in the quality of education could point to the stultifying and alienating features of the capitalist labour process. The argument was bounced back onto the controllers of the capitalist labour process; the onus was on employers to justify the idiocy of work in capitalism. Edgley's analysis was a breath of fresh air at a time when employers and supporting politicians in both major parties were hypercritical of schools and young people for failing to meet industry's needs. This powerful conceptual critique, which unfortunately has had few imitators, pointed to a need to analyse the capitalist labour process so as to counter the arguments of those who wish to shackle education within the confines of industry's needs.

Frith (1978b), presented a similar argument but drew its conclusions in a sharper and more explicit form. Faced with criticisms from employers about the quality of school leavers, teachers were urged to '...switch public attention from the school process to the labour process.'(p.51). It was acknowledged by Frith that in order to do this successfully there was a need for teachers to understand the labour process in order to understand 'the real meaning of industrialists' demands.'(ibid.p.52). Industrialists' demands were ultimately founded on 'blatant mystifications' according to Frith. These mystifications resulted from the fact that there was little connection between the skills (especially literacy and numeracy skills) that employers said they needed and the actual tasks young people performed in the labour process. In order for teachers to counter the claims of industrialists on falling standards, ignorance of the world of work and poor

discipline and work attitudes, teachers had to move from being on the defensive, through attempting to justify what went on in schools in relation to industrial needs, to the offensive, through a critique of the '...idiocy of the capitalist labour process.'(ibid.p.51). By focussing on schools, teachers and the Left would leave '...unquestioned the notion of industrial needs.'(ibid.p.47). Employers would be let off the hook.

Frith held that there was a disjunction between what employers said their needs were and their real needs in relation to the sorts of jobs young people did. His evidence for this rested on a reading of MSC reports and speeches made by top MSC officials. Frith's analysis in his (1978b) suggested that research into first, employers' accounts of what their needs were, what skills, attitudes and personality traits they required in young recruits; and secondly, the extent to which young people possessed these attributes; and thirdly, the extent to which skills such as numeracy and literacy were used in the jobs young people took up in the labour process was required to assess the depth and significance of this disjunction.

These two articles incorporated a critical attitude towards the notion of employers' needs, and placed an analysis of the capitalist labour process at the forefront of the critique of employers' needs. In recent years this critical attitude has taken a token form, devoid of the depth of analysis employed by Edgley and Frith in 1978.

(iv) The Needs of Industry: Employers do Not Know What they Are - Why?

There was another reason for taking a sceptical attitude towards employers' needs. The employers themselves seemed confused or uncertain about what their needs were (Central Policy Review Staff:1980; MSC/Coventry Education Department:1977c). This point was noted by Frith (1979), without drawing the obvious conclusion; if employers did not know what their needs were, then the idea that schools could meet industry's needs was unrealistic. Schools would be operating in the dark. As it turned out, there was a level of

agreement about the general, overall, needs of industry, and we shall examine this point later. On specifics though, employers seemed vague, confused and contradictory. It was perfectly legitimate to point this out in the late 1970s when there was only one substantial study which addressed the issue of employers' needs (MSC:1978). But writers were still making the same point about employers being confused or ignorant about their own needs well after the publication of a whole series of studies which had provided a wealth of information about employers' needs regarding youth jobs. Finn, for example, noted that:

'...employers' educational needs were extremely ambiguous. They could in fact be contradictory, confused or simply unknown.'(1987:p.119).

Brown (1987a,1987b) and Hall (1984) made similar points.[8]

With two exceptions (Education Group:1981; Finn:1982,1987), there was little real analysis of the source of these contradictions and confusions; were employers genuinely ignorant and confused about their needs (and if so why); were they contradicting themselves or each other (and again, if so why)? Of the major studies which addressed the issue of employers' needs vis-a-vis youth labour in the early 1980s, (Ashton and Maguire:1980b; Hunt and Small:1981; Williams:1981; Ashton, Maguire and Garland:1982; Finn and Markall:1981a,b; Cuming:1983) - all but one of these studies were very clear and unambiguous in one respect; work attitudes was the most important category of attributes sought in applicants for youth jobs.

This study concurs with these findings. At the point of recruitment, employers were defining their needs first and foremost in terms of work attitudes. Hunt and Small's (1981) was the only dissenting study on this point; the employers in their study saw personality traits as being most important. The lack of analysis on the dominance of work attitudes, this relatively consistent emphasis, cannot just be brushed aside with a quotation from a report by a defunct government think-tank from 1980.

Not only was there little analysis of the apparent contradictions within employers statements of their needs, but there was silence on the main finding of studies into employers' needs: the importance of work attitudes.

On the first point there were a few exceptions. The following section examines the work of the Education Group (1981) and Finn (1987) on the question of ambiguities in the needs of industry as expressed by employers.

(v) Contradictions and Confusions in the Articulation of Employers' Needs

The only substantial analysis of the apparent contradictions and inconsistencies in summations of employers' needs can be found in the Education Group (1981) and the work of Finn (1987). This analysis is important because it displays analytical errors which are often made within discourses on the needs of industry.

The Education Group (1981) rightly argued for a complex view of industry's needs. They meant an analysis that takes into account the fact that different capitals had different needs rather than trying to derive the general requirements of capital-in-general from an analysis of the conditions underpinning the accumulation of capital. According to the Education Group, employers' educational needs differed along the lines drawn by the organic composition of capital. They argued that labour-intensive industries employing what they called routine labourers had different needs to '...highly automated technically sophisticated industries.' (ibid.p.21). They analyse employers' needs not on the basis of different sectors of capital but on technical organisation and the hierarchies of labour.

Empirically, this procedure for analysing employers' needs makes no sense. Firstly, it is doubtful whether industries can be consistently labelled either capital or labour intensive. For example, in the engineering industry, one might seriously question whether sheetmetal and patternmaking shops, relatively traditional engineering trades, can be equated with large batch production firms using CNC (Computerised Numerical Control) machines and expensive machining centres.

There is a deeper objection. The Education Group pointed out that both labour-intensive and capital-intensive industries might have their interests served by the same set of institutions. They did not specify what these

institutions were; presumably they had institutions like the CBI in view, which represented a variety of industries. Within these institutions, argued the Education Group, different demands from the various industries were resolved by political means. Again, a failure to specify; what were these political means, and what were the sites and nature of the struggles between different industries?

They then argued that the conflicts between industries are at their most intensive within certain agencies of the state; again no specification of the agencies. Within these agencies, it was argued, different sections of capital are locked in struggle, each trying to assert their needs.^[9] At this point the Education Group's analysis breaks down completely. Insofar as any struggles between different sections of capital take place, they are pursued on the basis of representatives from various employers' organisations attempting to justify the importance of their industries to the local and national economy to members of Government appointed committees, schools, local education authorities, the Department of Education and Science (DES) and DoE and any other organisations involved in education and training - arguing that their educational and training needs be given an increased priority, sometimes over-and-above that of other industries.^[10] These struggles do not take place between groups representing labour-intensive and capital-intensive industries. On the wider struggles, over the measures, activities and policies flowing from and pursued by the state in relation to education and training, the Education Group's own analysis gets by well enough without reference to the split between labour and capital intensive industries. This is not to deny that labour-intensive and capital-intensive businesses do have different needs, but it is to recognise that the forms in which struggles between sections of capital are pursued do not, empirically, flow along the lines suggested by the Education Group.

Aspects of the argument of the Education Group were later repeated by Finn (1987). Finn was one of the authors in the Education Group. In this later work, he noted that employers' educational needs varied significantly between industrial sectors and '...other sectors of employment.'(p.120). He

had noted this point in a much earlier article (Finn:1979). Finn then moved this argument about employers' educational needs onto new terrain with the following argument:

'The issue is not so much a question of the needs of employers as the logic of capitals. A very different educational logic will attach to businesses with a high ratio of technically or commercially skilled labour - say the banking or telecommunications industries - to businesses which have found a way of exploiting casual labour by for example, a reversion to domestic outwork. The former represents educational requirements at their most advanced level, the second an extension of nineteenth-century modes of exploitation which were crudely anti-educational in their effects.' (1987,p.120)

The reader is left to draw out the implications. The section in which this argument appears started by trying to trace the source of ambiguity and contradiction regarding employers' educational needs. The apparent implication is that contradictions and inconsistencies involved when employers try to summarise their educational needs derive from the different educational logics attached to labour processes. This seems reasonable, but there are problems in both the form and the content of the analysis.

Firstly, Finn confuses and conflates levels of analysis. From an initial concern with different sectors of capital having different educational needs Finn jumps to businesses, individual capitals, having different educational logics. Insofar as educational logics exist they seem to pertain to individual capitals. But Finn wants to go further; by bringing in the examples of the banking and telecommunications industries he seems to want to argue that educational logics take on a concrete existence across whole industrial and commercial sectors. The argument would be true if the proportion of technically or commercially skilled labour was relatively stable across these industrial sectors. Finn does not explore this point empirically. He relies on assertion once more.

Secondly, the idea of there being an educational logic, even within a single firm does not make sense. There are usually various educational logics, especially within large firms. Even where technically or commercially skilled labour makes up the bulk of the labour force in a firm, different educational logics pertain to those workers in the labour process of that

firm that fill semi-skilled and unskilled work. The educational requirements of the roles they fill in the labour process might be significantly lower than the educational requirements concurrent with other skilled, scientific and technical roles. It is inappropriate to claim that there is a monolithic educational logic deriving from the need for workers to eventually fill key roles in the labour process. It would seem reasonable to suggest that there may be significant differences in technical and literacy and numeracy skills eventually required by student apprentices as they entered the labour process as compared with craft apprentices. It would seem that the idea of a single educational logic dominating even one large firm, let alone a whole sector, misrepresents reality.

Thirdly, as Finn shifts from employers' educational needs (and the task of explaining their contradictory and ambiguous nature) to educational logics he leaves behind the logical possibility of explaining the former in terms of the latter as he fails to specify the nature of the relationship between employers' educational needs as expressed by employers themselves and educational logics.^[11]

Fourthly, having said that an analysis of the educational logics of businesses was what was required rather than an analysis of employers' needs, Finn goes on to derive the general needs of industrial capital in relation to skilled workers. What industrial capital required in terms of skilled workers was:

'...workers with the flexibility, adaptability and disciplines which would enable them to be quickly trained (and retrained) for specific jobs over relatively short periods of time.' (1987:p.120).

His actual analysis proceeds in terms of employers' needs not educational logics. Yet when he talks about employers' needs in the context of specific arguments located within his analysis he reverts to making statements about the needs of fractions of capital - something he warned against.

In trying and failing to specify why employers' needs appear contradictory and confusing, the Education Group and Finn commit basic errors repeated throughout the literature on the needs of industry. Firstly, there is the

tendency to jump around between levels of analysis within specific arguments; from talking about the needs of individual capitals to sectors and fractions of capital to capital-in-general - as though this changes nothing in terms of the logic of the argument and its relation to the phenomena being analysed. Finn is aware of this point more than most; (see Note [11]). Secondly, the relationship between the needs of employers as operationalised at the point of recruitment or articulated to researchers or the media, and needs as the requirements of labour processes is often ignored and confused. Finn slips between examining these phenomena in his argument as though it does not matter. But there is no necessary identity between needs as the requirements of a labour process, (the manual skills, technical, numerical and literacy knowledges and skills necessary to perform specified tasks in a labour process), and employers' definitions (either stated or operationalised at the point of recruitment) of their needs in relation to the same labour process. Recruiters of youth do not have perfect knowledge of their labour processes, as we shall discover.

(vi) The Needs of Capital-in-General

There are basically four perspectives on this issue in the literature. All of them are problematic in one way or another. Briefly, the four views are: firstly, that the general needs of capital are defined as a result of a political process centred around class struggles within state agencies and organisations concerned with education and training and around practice within and policies affecting these agencies and organisation; secondly, that the state can act directly for capital-in-general in some circumstances or to a certain extent, and the actions of the state in relation to capital's needs cannot just be seen as the results of the class struggle; thirdly, general needs are defined in terms of what is essential to working in a situation where labour processes are going through rapid change; finally, general needs are simply those expressed by employers. These perspectives are examined in turn below.

At the beginning of the previous section it was noted that the Education

Group (1981) argued that industry's needs must be analysed in terms of different, coexisting capitals and not the monolithic notion of the needs of capital. According to Finn, (one of the Education Group authors), the process of attempting to meet the needs of British capital only takes on a palpable social reality through the class struggle:

'...what is "necessary" for British capital can only be derived in the most general terms. What is perceived as being in the interests of capital, and the strategies pursued to attain them are established through class struggle. Primarily between capital and labour but, flowing from this, between capitals and capital fractions.' (1979,p.1).

Finn argues that insofar as anything can be said about the needs of British capital-in-general, these general requirements must be seen as the outcome of class struggle between different capitals and fractions of capital within specific agencies of the state concerned with the reproduction of labour power. Quoting from a work by the Edinburgh Group delivered at the Conference of Socialist Economists Conference in 1977, he points out that the actual measures and activities of the state, which are involved in overcoming contradictions and antagonisms between capitals and fractions of capital, are the end result of these struggles. The needs of capital-in-general have no social reality independent of these class struggles according to Finn. But here the notion of the needs of capital-in-general dissolves completely. The relationship between the general needs of capital and the ways in which these needs are subsumed under the class struggle within the agencies of the state which are involved in education and training becomes highly contingent. To say that what is **perceived** to be in the interests of British capital regarding its needs is established through class struggle within and around state agencies involved in education and training is to ignore the issue of divergences between real and perceived needs. Perceived interests of capital on general needs (flowing from the results of class struggle within state agencies involved in education and training) might be different from actual interests deriving from real needs. Finn has no way of analysing this. Everything rests on the outcome of class struggle, on the general needs of capital as they are perceived as the result of this struggle. Ultimately Finn says nothing about the nature of

the actual needs of capital-in-general.

Writers expressing the second view, (Lovejoy, Bedale and Halford:1980; Harris:1982) have a much stronger sense of the needs of capital-in-general than the previous perspective. In their analysis of training in capitalism, Lovejoy, Bedale and Halford (1980) argue, in a similar vein to Finn (1987), that the state is a site of struggles between classes, but nevertheless, the state intervenes in training in the interests of capital-in-general in a definite way. The authors explain this process in relation to the 1964 Industrial Training Act and capital's need for skilled labour power. This Act set up a framework for the production of skilled labour for capital as a whole, but specific sectors of capital had arrangements suited to their needs within this framework through the setting up of Industrial Training Boards for each industry. According to Lovejoy, Bedale and Halford, from the perspective of individual capital, investment in the training of skilled labour power is costly and the return on this investment uncertain. Training skilled labour power is an uncertain investment in capitalism because capitalists do not own workers. There is nothing to stop skilled workers from leaving to go to competitors as soon as they have finished their training. In recognition of this, some individual capitals respond by training below their own specific needs and make up the shortfall through poaching skilled workers from other firms who do train. The trade cycle exacerbates this fundamental contradiction as capitalists cut back on training during an economic downturn (as they cut back on all costs) in an effort to survive. When economic activity recovers the general shortage of skilled labour brought about by the fundamental disincentive to train is given a further twist as individual capitals compete for scarce skilled workers. In some industries, and particularly in the south, and even in the West Midlands, this final stage pertains at present (Beecham and Axe:1988).

The virtue of this account is that it shows skill shortage to be not just an accidental result of the chaos of the trade cycle, as Finn (1987) and the Education Group (1981) hold. Finn explains skill shortages entirely in terms of the trade cycle (1987, pp56-57). Moreover, he explains the intervention of the state in training and the 1964 Industrial Training Act on the basis of

the effects of the trade cycle on industrial training. He also explains the phenomenon of firms poaching skilled labour ^{through} the effects of the trade cycle too. If the trade cycle is this crucial then Finn has the problem of explaining why the state intervened in training in the 1960s; after all, the trade cycle is as old as capitalism.

Lovejoy, Bedale and Halford also have the same problem within their theorisation. In another paper, Lovejoy (1981a) addresses this problem and argues that the state tends to intervene in industrial training when the contradiction between the needs of capital-in-general for a skilled workforce and the failure of individual capitals to train skilled workers assumes a particularly sharp form. However, he argues, there is nothing inevitable about state intervention at these points. Empirical analysis of the balance of class forces, the extent to which the trade union movement makes training a significant issue and the extent of pressure on the state to intervene in training, the resistance of employers to state intervention in training, Government policies, the influence of education and training institutions and accumulation crises must all be examined. Insofar as the state does intervene in industrial training it does so on the basis of trying to resolve the contradictions deriving from the propensity of individual capitals to train at an insufficient level.

This is a considerably deeper analysis. Skill shortages result from the nature of the capitalist labour market. Lovejoy explains this point in the following way:

'We see training as a problem inherent to capitalist industry itself, rather than a current or peculiar phenomenon...Because of the capitalist nature of the labour market, i.e. free wage labour, the costs of reproduction of labour power (training) are unevenly spread across an industry, with the consequence that individual capitalists may show reluctance to train - the problem is expressed in terms of poaching.' (1981a, p.6).

Whilst sharing agreement on this point, it will be argued later that further contradictions in the social production of labour power in capitalism also result in capital underproducing labour power. Lovejoy's analysis is correct in pointing out certain specificities of capital's reluctance to train in

terms of the labour market, but fails to specify the role of the production of labour power itself in this process. This is despite Lovejoy's analysis of the capitalist labour process in general and in relation to the construction industry in particular, and the training process in construction (Lovejoy:1981a,1981b).[12]

Lovejoy, Bedale and Halford (1980) further argue that insofar as the state intervenes in industrial training the contradiction between individual capitals (which have a need for particular types of worker) and capital-in-general (the production of mobile, flexible workers) is heightened.[13]

The work of Lovejoy (1981a,b) and Lovejoy, Bedale and Halford (1980) is superior to those such as Harris (1982) who, after a skimpy detour into nineteenth century educational history, declare that schools reproduce labour power in general for capital-in-general (pp79-80). Harris goes on to specify the labour power needs of capital-in-general. First, the 'bearers' of labour power must have certain skills and knowledge; secondly, they must possess certain norms, values and attitudes not specific to particular jobs, but which facilitate the reproduction of the social relations of production through their being willing to enter capitalist enterprises given the prevailing production relations. Apart from confusing labour and labour power Harris' analysis ultimately defines employers' general needs in terms of the reproduction of the social relations of production. No doubt schools play a part in this, but to say that they reproduce the capital relation themselves claims miraculous powers for capitalist schooling.

The third perspective sees capital's general needs in terms of requirements for working in a situation where labour processes are changing rapidly. Frith (1978b) argues that given the pace of change in the capitalist labour process in recent years then employers' general need is for:

'...a labour force with a general ability to learn, adapt to change and accept training and retraining.'(p.49).

Frith substantiates this with reference to an MSC report which talks about the need for skilled workers to do more than one type of job throughout their working lives. Holloway and Picciotto (1979) relate this perspective

on general needs directly to the education system:

'What capital wants out of the education system is not so much workers trained for industry as adaptable **individuals** who are willing and have a co-operative attitude to work, who take their civic duties seriously and do not regard themselves as part of a class standing in hostile opposition to their exploiters.' (their emphasis, pp3-4).

Others have noted the activities of the MSC in attempting to produce a new type of flexible worker through its youth training schemes (Phillips:1984; Finn:1987). What is wrong with abstract statements about employers' needs such as those of Frith and Holloway and Picciotto is that they sound as though they could be true of capitalism since the rise of what Marx called Modern Industry. It can be argued that Holloway and Picciotto's statement above was just as true in 1930 in Britain as today, except perhaps that the pace of change in labour processes in the last ten years was greater than in the 1930s. Historical specification is necessary. On this score Frith's work is superior to that of Holloway and Picciotto's as he relates capital's abstract needs to changes in the labour process and shows how these changes have resulted in the need for '...generalised, semi-skilled labour power' in the contemporary situation (1978b,p.50).

The important point about the contemporary situation is not just the pace of labour process restructuring but the fact that agencies of the state, in particular the MSC, are making a more determined bid to produce adaptable, flexible labour power through training schemes. This point is implied in Frith (1980b). Thus, abstract statements about the general needs of capital take on a greater explanatory significance when they are related to changes in the labour process and strategies pursued by state agencies in the realisation of the general needs they refer to. The specification of historical phases then enters in.

A reading of Frith's work points to the fact that what is peculiar to the current historical phase is that the pace of labour process change is historically rapid, requiring a particularly deep restructuring of the labour market, that the nature of contemporary changes (especially a greater reliance on strategies of labour control involving 'responsible autonomy' -

Friedmann:1977a,b), and the more concrete, clear and determined bid by the MSC to meet the general labour power needs of capital makes the current situation historically peculiar. Without analyses along the lines of Frith's, abstract statements on employers' general needs remain mere abstractions. Empirical work is required to show the force of the abstract, general needs within particular historical phases.

There is another problem with these abstract, general statements - a problem raised earlier; how do the needs of capital in these general statements relate to the needs of individual capitals? This point is usually ignored. Only Lovejoy, Bedale and Halford (1980) have discussed the general point, noting that the needs of individual capitals (for particular types of workers) can come into contradiction with the needs of capital-in-general (for mobile, flexible workers). Empirically this is significant. The CEES research shows that from the point of the individual capitalist, particularly in relation to the training of skilled workers, flexibility and adaptability is not a concern uppermost in their minds. Why is this so? After we have been told that capital-in-general requires flexible, adaptable workers, why do individual capitalists and their agents (managers and other recruiters) not demand flexibility and adaptability in their young workers to any great extent?

This is an issue raised in a stark form in Part Two, (especially Chapter 7). It remains a mystery, and the fact that no-one has attempted to answer it rests on the fact that there has been no sustained analysis of the relationship between the needs of capital-in-general, fractions and sectors of capital and individual capitals, and the difference between what employers say their needs are at the point of recruitment and the actual needs flowing from the labour process in their individual enterprise. There is no framework within which it **could** be answered. We are back to the problems and errors discussed in the previous sub-section.

With reference to the fourth perspective, Brown (1987a,1987b) argues that employers themselves express a need for a flexible and adaptable workforce. In terms of the findings of the CEES research this is not true. Brown argues

that employers are asking for flexible and adaptable workers. He differs from Frith in that he is not saying that flexibility and adaptability are required because of changes in the labour process and forms of labour control. Empirically, in terms of the CEES research, Brown's position appears untenable. CEES employers did not rate flexibility and adaptability in the attributes sought in applicants for engineering apprenticeships very highly. These factors were not amongst the leading attributes sought. This finding throws Brown's generalisation into question.

The main problems of discussion of the needs of capital-in-general stem from a reluctance to discuss either the relation between the general needs of capital and the needs of fractions, sectors and individual capitals, or the relationship between these needs as expressed by employers and the actual concrete needs flowing from the organisation of the labour process. Most writers ignore these points. Only the Education Group (1981) and Finn (1987) (on the needs of different sectors of capital) and Lovejoy (1981a,b) and Lovejoy, Bedale and Halford (1980) (on the needs of capital-in-general and individual capitals), and to some extent Frith (1978b,1980b), address these issues. Though they see the crucial issues involved, they provide fragmentary and inadequate analyses.

The bulk of the analysis of employers' needs was carried out from 1978-1982. Only Finn (1987) has written about the topic to any extent in recent years. Yet this work was basically a restatement of an article he wrote in 1982. To all intents and purposes, the debate about employers needs ended in the early 1980s. Recent work has not advanced the debate. The problem of pushing forward the insights on employers' needs, from the limited gains in the late 1970s and early 1980s, remains. How do we start? From what the leading figures in the debate on employers' needs, Frith, Lovejoy, Finn and the Education Group have said it might seem pertinent to start at the labour process. It would seem reasonable to suppose that analysis of the labour process should precede an examination and research into employers' needs - which are basically labour power needs flowing from the labour process. The next section puts the argument for starting at the labour process.

(vii) A Starting Point: the Labour Process?

'...it is not the educational system per se that channels people into jobs. The specific range of occupations, their differentiation and hierarchies are determined outside the educational system in the organisation of the production process itself.' (Sharpe:1980,p.124).

For Sharpe an analysis of capitalist schooling starts with analysis of the labour process. Employers' needs have to be understood in terms of changes in the labour process as these changes result in different demands on schooling (Frith 1978b). Any discussion of the relationship between the labour process, employers' needs and education eventually goes back to Frith's seminal work; 'Education, Training and the Labour Process', (1980b).

In an earlier article (1978b), Frith made some preliminary observations on the relationship between the labour process, employers' needs and education. In (1980b) he discussed these issues in greater depth. He argued that:

'What we need, analytically, is not a functionalist account of the match and mismatch of education and industry, but a dynamic account of the interaction between schooling and the labour process.' (1980b,p.35).

He gives such an account through the labour process perspective of the Brighton Labour Process Group (1977) in his (1980b). His most pertinent conclusion, discussed in Chapter Two, is that capital has to treat labour as 'subjective' (as labour has consciousness) and this subjectivity is partly formed through ideological, political and educational processes. It is not just formed within the confines of the labour process. Furthermore,

'...features of the capitalist labour process such as deskilling, the fragmentation of labour, the mental/manual split can't be explained by reference to the capitalist labour process alone (that would be to invite the problems of technological determinism).' (1980b,p.37).

The importance of education lies in the fact that it plays a part in the formation and creation of the subjective aspect of labour. It also plays a part in the formation and maintenance of the phenomena noted in the quotation above. There is a dynamic between employers' needs (ultimately resting on labour process requirements) and the processes of capitalist schooling. The state has to manage the tensions within this dynamic. As Frith notes:

'My emphasis has been on the educational demands of industry, but I have also tried to show that educational processes put their own pressures on employers and I am not convinced that the state will be able to settle the resulting arguments, despite the post Great Debate consensus among educational policy makers that schools must meet the employer-defined 'needs' of industry.' (1980b,p.40).

But the Thatcher government has largely settled the arguments: in favour of the needs of industry. Unfortunately, there has not been an attempt to extend the analysis suggested by Frith (1980b), except Lovejoy (1981a,1981b), but then his work has remained largely unpublished and its impact therefore much reduced. This work deals with the labour process and **training**; schooling does not feature prominently^[14]

There has been some recognition that the analysis of the labour process was important in terms of understanding schooling. Sharpe (1980), Education Group (1981), Sarup (1982), Apple (1985), and more recently Buswell (1986) have noted the need to analyse the labour process in terms of its impact on schooling and/or in relation to a discussion of employers' needs. Their work lacks the sophisticated approach of Frith (1980b), and makes no real advance in terms the sort of integrative approach set out there. Exposition of the labour process debate is to the fore (Sharpe:1980; Education Group:1981; Apple:1985), parallels are drawn between social relations in the labour process and schooling (Sharpe:1980; Apple:1985), and there are broad injunctions to start with the labour process in the analysis of schooling (Sharpe:1980; Sarup:1982). Buswell (1986) notes, but does not demonstrate, the importance of the labour process. After explaining how researchers need to take both the labour process and the labour market into account in understanding schooling and youth training, there is a brief exposition of the labour process debate and broad injunctions to the effect that when we examine the 'nature of the training relationship' we must focus on the nature of the labour process, and when we examine the effects of MSC schemes on youth wages and employment we need to focus on the labour market. Yet the ways in which these interact are not specified. There is a perfunctory treatment of the labour process.^[15]

The importance of reference to the labour process from the point of this

thesis is that employers' needs and the demands that they make on schooling and training partly result from changes in the labour process. A number of writers have pointed out that changes in the labour process result in new needs and demands being made on schooling and training (Musgrave:1967; Frith:1978b,1980b; Lovejoy, Bedale and Halford:1980; Sarup:1982). Frith (1980b) points out the danger of falling into a technological determinism here. He notes that changes in the labour process typically flow from problems of labour control resulting from the class struggle. Changes in the labour process do not just result from crises of accumulation, the declining rate of profit, competition and the introduction of new technology (p.37). Employers' needs are the result of all these elements as they relate to specific labour processes. Furthermore, as Frith (1980b) points out, there is a dynamic between schooling and the labour process, no simple determination. The processes of schooling can effect the ways employers define their needs. As Willis (1977) has noted, the manpower requirements of industry do not simply determine the formation of particular kinds of labour power; it is not a causal relation (p.171). The theorisation needs to be integrative, to take all the social processes involved in the transition from school to work into account, and dynamic - referring to the changing relations between the labour process and schooling.

There is general agreement in the literature on one point; that the labour process is the starting point of analysis as:

'The educational system, on the whole, relates its activity to the quantity and quality of the labour force required by the capitalist labour process.' (Sarup:1982,p.111).

As the labour process determines schooling to a greater extent than schooling determines the form of the labour process we must start with an analysis of the former, it is argued. The following section argues against the consensus view of starting with the labour process.

(viii) A Starting Point: Labour Power

Whilst there is a need to bring the labour process back in it does not

follow that it is the necessary starting point of analysis. Although schooling and the labour process are institutionally split in capitalism they are in fact linked through a social process. The social connection between schooling and the labour process is labour power and its social production. Labour power is only partially produced through schooling. Its social production continues through practical education and training and is finally completed through participation in the labour process.

The starting point on this account of the relation between schooling and the labour process is labour power itself, its essential nature and its attributes. Analysis must start with labour power itself rather than the labour process as it must be specified what is to be included in the concept of labour power needs as they relate to the labour process. In addition, as the social production of labour power encapsulates both aspects of the labour process and schooling, then, rather than starting at one end of the spectrum, there is a need to theoretically grasp the process as a whole. This can be most productively started through a consideration of the unique commodity produced - labour power. In sum, the theoretical and empirical grasp of both the overall relation between the labour process, schooling and labour power needs revolves around an appreciation of the nature of labour power and what is involved in its social production. Starting from the nature of labour power and then moving to its social production focusses on the very social processes that form the pivot of the connection between the labour process and schooling.

(ix) Summary

In this chapter it has been argued that as researchers and theorists operating within the broad field of the transition from school to work have moved away from a concern with the labour process and employers' needs since the early 1980s certain political and theoretical costs have been incurred. The original work on employers' needs and the labour process contained errors and fudged certain issues. In particular, this work failed to examine the relationship between the needs of individual capitals, sectors,

fractions of capital and capital-in-general in sufficient detail. There was also a lack of attention and depth of analysis regarding the relationship between how employers defined their labour power needs at the point of recruitment and the actual, real needs flowing from the organisation of the labour process within their firms. Failure on these two scores created problems within the theorisations of those writing on the labour process and employers' needs in the late 1970s and early 1980s, as we saw in the cases of the Education Group (1981) and Finn (1987). The political costs stemmed from the fact that as this original discussion of the labour process and employers' needs was inadequate then it made it easier for the Right to use the 'needs of industry' as the justification for an increasing vocationalisation of the school curriculum and the interventions of the MSC in the youth labour market. As Brown (1987a) has noted:

'...the Thatcher government has engaged in a major programme of educational reform in an attempt to ensure that the educational system meets the needs of industry. This 'new vocationalism'...has manifested itself in a number of recent programmes such as the Technical and Vocational Initiative (TVEI); the Certificate of Pre-Vocational Education (CPVE); and more recently the launch of twenty City Technology Colleges (CTCs).' (p.2).

The Left critique of employers' needs, with its errors and fudges was a poor theoretical weapon in the fight against the new vocationalism and the project of the Right. The writers on employers' needs of the late 1970s and early 1980s rightly argued that an analysis of employers' needs must be made with reference to the labour process, but they only went a short way along this road, and in effect the Marxist analysis of the relationship between employers' needs, the labour process, recruitment and the labour market for youth ended in the early 1980s. Attempts at integrating these elements within an overall analysis, following the example of Frith (1980b), did not materialise. There was, instead, a retreat from a concern with the labour process and employers' needs altogether. The problems of the original theorisations were left intact and ossified. Intellectual effort was concentrated in other areas within the transition from school to work: the youth labour market; the differentiation of working class youth in their reactions to schooling and how this differentiation affected transition from

school to work; the new vocationalism; youth unemployment and the interventions of the MSC. Thus, the labour process became the missing ingredient in the transition from school to work. The labour process was left to the labour process theorists.

This was despite the fact that the labour process debate had developed considerably since the late 1970s. After the early 1980s, fragmentation set in in the field of the transition from school to work. New subspecialisms started to emerge, especially a new sociology of the youth labour market, which its gurus framed devoid of reference to the labour process. However, such fragmentation is commonplace in social science, as Shaw (1975) explains, and is to be expected. Going beyond Shaw, it can be argued that in the case of the transition from school to work the process itself is a highly fragmented social process based on the institutional split between production and education in capitalism. Analysts must show the social basis of this fragmentation as opposed to organising new sub-disciplines around it. They must also be able to show how labour power is produced, the dynamics and contradictions inherent in this process, and theorise the relation between this process and the labour power needs of capital. The starting point for this analysis is not the labour process, but more fundamentally, labour power itself. The analysis of labour power comes first as it enables us to understand the nature of the needs of industry, and it is also the first step in uncovering the real social connection between the labour process and schooling - the social production of labour power.

In sum, the analysis of the needs of industry has so far been inadequate. The next chapter starts to remedy this deficiency. Critical analysis of the needs of industry, as argued in this chapter, must start with an analysis of labour power. This is because the needs that the concept 'needs of industry' refers to are basically labour power needs. The following chapter, together with Chapters Six-Eight, form the theoretical backbone of the thesis and the foundation of the critique of the concept of 'needs of industry'.

Chapter TwoUNCOVERING THE SOCIAL PRODUCTION OF LABOUR POWER IN CAPITALISM(i) Introduction

This chapter is the starting point for theoretical and conceptual development within the thesis. It brings together the need to more adequately theorise the needs of industry with an understanding of the processes involved in socially producing labour power. These aspects are linked in capitalist social reality. There are first of all the needs flowing from the labour process, the attributes of labour power to be produced within labour power, and secondly, the processes through which these attributes are socially produced. These two elements form the study of the social production of labour power in capitalism. The thesis is primarily concerned with the former.

It is argued that what are referred to as 'needs of industry' or employers' needs are basically labour power needs. Analysis of labour power needs must start with an examination of labour power itself. How labour power is understood will partly determine what counts as labour power needs. It is argued that from the perspective of capital, attributes of persons, such as work attitudes and personality traits, can analytically be included as attributes of labour power. The analysis then moves towards a concern with the production of labour power. This is approached firstly through a confusion within the literature; over whether labour power is produced or reproduced. The distinctive features of the social production and reproduction of labour power are made clear with reference to Marx. The institutional elements which can play a role in the production of labour power are then sketched out, and the social location of the recruitment process in relation to the social production of labour power is exposed. The recruitment process comes at a point before labour power has been fully produced. This has consequences for the control and criteria of recruitment, consequences which will become apparent when the empirical work is examined.

(ii) The Needs of Industry and Employers' Needs As Labour Power Needs

Employers have many 'needs': to keep wages to a minimum, low interest rates, a favourable exchange rate, might be some. When they talk about their needs or demands in relation to education and school leavers they invariably refer to their labour power needs. This point was made briefly in the previous chapter and in the Introduction, but an analysis of the needs of industry requires that it is made explicit. The language of the 'needs of industry' and employers' needs reduces largely to a specification of employers' labour power needs. This specification proceeds through an elaboration of the attributes of labour power required for roles in the labour process, which in total make for efficient performance in the labour process. Arguments and commentary on the 'needs of industry' in relation to education and school leavers is ultimately about labour power needs and the requisite attributes of labour power - competences, skills, attitudes, personality traits, physical qualities and abilities - which constitute the capacity to labour for various types of labour power.

This can be observed directly when employers expand on their 'needs' themselves. They do not say that they are defining the attributes of the labour power they require when talking about their needs; they do not operate within a Marxist framework. Yet what they say amounts to the same thing. For example, Ferguson and McWilliam (1922) put forward the demands of industry on education in the following way:

'He [the industrialist:GR] would look for increased adaptability, vision, the development of a sense of responsibility, accuracy, dexterity of hand and brain, and the provision of certain antidotes against the repression of initiative.'(p.26).^[1]

This elaboration of the attributes sought in school leavers is basically about attributes of labour power - the capacity to labour in the labour process. Part Two shows that the CEES employers elaborate what they are looking for in applicants for engineering apprenticeships largely, but not exclusively, in terms of labour power needs.

Secondly, within the literature, the debate about the needs of industry and employers' needs takes place firstly in terms of labour power needs and the

attributes of labour power. How schools and other institutions figure in meeting labour power needs is another central theme. Few make this explicit. Frith (1978b,1980b) is an exception. He argues that in terms of employers' needs, their demands on school leavers: 'The dominant demand is for generalised, semi-skilled labour power.' (1978b,p.50 - my emphasis). However, he does not expand on this point.

On the other hand, Finn (1987) talks in terms of employers' 'educational needs'; this confuses the issue. The labour process does not require 'education'. Employers do not need education in the abstract; what they require is labour power which incorporates certain abilities and attributes involving competences learnt through schooling, training and other institutions. Sarup (1982) includes all the necessary insights without putting them together. He argues that: 'Schooling is basically to do with the production of the commodity labour power.'(p.28), and defines employers' needs in terms of attitudes, skills and competences which workers possess (pp30-31,p.42,p.74) without making the connection - that employers' needs are basically labour power needs as characterised in his work. Thus, it is necessary to make the simple point obvious; that the needs of industry or employers' needs are basically labour power needs.

Thirdly, on the few occasions that writers have devised frameworks for the analysis of employers' needs, they do it in terms of labour power needs without making this explicit. Although those that have devised such frameworks do not **consciously** set them within the context of labour power needs, (for example, Musgrave:1967; Landes:1977; Oxenham:1984), nevertheless, these frameworks have labour power needs at the centre.[2]

Having noted that employers' needs are basically labour power needs in relation to school leavers, the next section starts with an examination of labour power and moves on to its social production. This is because certain consequences for the interpretation of the empirical data flow from an understanding of the nature of labour power. It is also the logical starting point for a presentation of the theoretical position inherent in the thesis.

(iii) Marx and Labour Power

As contemporary writers have not approached labour power with an interest in its attributes and social production, this discussion rests on an interpretation and development of Marx. An uncovering of the social production of labour power and employers' labour power needs rests on a grasp of the unique commodity involved. For Marx, labour power, the capacity to labour, is:

'...the aggregate of those mental and physical capabilities existing in a human being, which he exercises whenever he produces a use-value of any description.' (1867, p.164)

This is what the capitalist buys when s/he lays out her/his variable capital in the form of wages. But labour power only becomes a reality (rather than a mere capacity to labour) by its exercise in the labour process, when labour power is transformed into actual labour and, becomes '...living, value creating labour power..' (1865a, p.29), for '...it sets itself in action only by working.' (1867, p.167).

Moore (1988) has argued that Marx's concept of labour power is a transhistorical one as '...obviously it is abstract and universal.' (p.68). According to Moore, Marx then goes on to '...provide it with a concrete form specific to the capitalist mode of production.' (ibid.). But as Nicolaus (1977) shows, Marx developed the concept of labour power in order to grasp the specific form of exploitation in capitalism. Sayer (1979) argues that one of the distinguishing features of capitalism is that labour power is a commodity. Marx was not interested in abstract and universal definitions in 'Capital' but phenomena specific to the capitalist mode of production. In disagreeing with Moore (1988) it could be maintained that the generality of Marx's definition of labour power derives from the fact that it is framed at the level of capital in general. It does not refer to labour power of a particular branch of industry or fraction of capital. Thus, when it is concretised in relation to particular capitals, then more can be said about the precise nature of the mental and physical capabilities involved.

What is clear is that labour power is a commodity, '...neither more nor less

than sugar'(1847a,p.152).[3] But then Marx overexaggerated in 'Wage Labour and Capital' (1847a) to make the general point. Like all commodities it has use value and exchange value; to this extent it is like sugar. However, it is a peculiar commodity, differing from sugar, in key respects. First, it does not strictly conform to Marx's characterisation of the commodity as:

'...in the first place, an object outside us, a thing that by its properties satisfies human wants of some sort or other.' (1867,p.43).

From the point of view of the labourer, her/his labour power resides within her/him as a capacity. For the capitalist it is an object outside her/himself. Unlike sugar, aspects of it (mental capacities) are unobservable.

Secondly, it is:

'...a commodity, whose use value possesses the peculiar property of being a source of value, whose actual consumption, therefore, is itself an embodiment of labour, and consequently, a creation of value.' (Marx:1867,p.164).

It is not only the source of value but has the capacity to create more value '...than it has itself'(1867,p.188); surplus value. And 'This is the special service that the capitalist expects from labour power.'(ibid.). Thirdly, it differs from sugar in that it is the subjective factor of the labour process; unlike sugar, it is a commodity incorporating consciousness, intrinsically and inherently, and through its consumption in the labour process which involves '...labour power expressing itself purposively: the subjective condition of labour.'(Marx:1866,p.980). We will return to this point later in this chapter.

Like other commodities it is also produced. Marx does not deal with the social production of labour power in totidem, although he gives valuable pointers on how such an analysis might proceed.[4] This was mainly because he did not have to deal directly with the issue. He assumes in 'Capital' Vol.I that labour power is always to be found to hand, in the labour market, and maintains this assumption in Vol.II (1878,p.577). Nevertheless, Marx is aware that labour power is socially produced, and that this is inherent in its being categorised as a commodity. Labour power is sold '...as a

capacity, a power..' (1866,p.1066), and '...a specific amount of labour time was required to produce this capacity, this power.' (ibid.,my emphasis). Thus, in this respect it is like all other commodities. However, labour power is different from other commodities in another respect in terms of its actual production. Marx argues that labour power is not, like other commodities, produced in the capitalist labour process (1865a,p.381); it is produced before it enters the labour process.^[5] Marx qualifies this point. Labour power is partially produced in the labour process through its activity. The worker develops his abilities in production (Marx:1857,p.90). As Harding (1981) notes, 'The labour process itself educates the individual worker..' (p.1).^[6] Supervision, instruction, on-the-job training, advice from other workers also play a part in this process. This process of raising the quality of labour power within the labour process is also part of the social production of labour power.

With close reference to Marx, it has been argued that labour power is a commodity. It enters exchange through the worker selling her/his labour power to the capitalist and its specific use value for the capitalist is that it creates value and surplus value when consumed in the labour process. It is the essential ingredient that ensures that the creation of use values in the labour process becomes a valorisation process. It has also been argued that, like other commodities, labour power is itself produced. However, it is a peculiar commodity, unlike other commodities in certain respects. There is a subjective, purposive aspect to it; elements of human consciousness (mental capacities) are intimately connected with it. It is part of the worker as a living individual. Labour power exists '...only as a capacity, or power of the living individual.' (1867,p.167). Furthermore, unlike other commodities it is not produced in capitalist conditions; capitalists do not produce labour power directly as a commodity to sell on the market, although they buy it in the labour market. As labour power resides within the worker it is impossible to sell without at the same time appearing to sell the worker, appearing to treat the worker as unfree, slave, labour. The capitalist cannot sell labour power separately from the worker as the former resides in the latter. Labour power is not detachable

from the labourer. It is not identical with the labourer, as some have concluded (Hodgson:1982 - see Note [5]). The capacity to labour is something the labourer possesses but it is meaningless to say that that is what the labourer essentially is.

Marx has the most to say about the social production of labour power when he examines the value of labour power and the costs of education and training in capitalism. Before the elements of the social production of labour power are outlined and the recruitment process socially located there is a need to consider two points about Marx's characterisation of labour power; the subjective aspect of labour power and what to include under 'mental capacities'. These points are essential to an understanding of the very nature of the labour power and its social production in general (the first point) and in contemporary capitalism (the second point).

The Subjective Aspect of Labour Power

Taking the general point first, given the subjective aspect of labour power (its mental capacities) then the attempt to produce these capacities in a particular form rests on a fundamental contradiction in the social production of labour power; the attempt to objectify subjectivity itself, to fix aspects of consciousness into definite forms as though they were things. This contradiction is never resolved as the agents of capital involved in the social production of labour power can never have control over the mental processes of the the potential labourer. Mental capacities and qualities can never be fixed for all time; they are inherently unstable and subject to alteration and interpretation by the possessor. Moreover, the mental capacities that the agents of capital wish to produce within the consciousness of the potential labourer depend on the assent of the latter as the learning of these mental capacities ensues. Insofar as this assent is not given then real class struggle is involved, a struggle over the control of the consciousness of potential labour power itself. However, this struggle is tempered by certain considerations.

Firstly, as Marx notes, the labourer is, in principle:

'...ready and willing to accept every possible variation in his labour power and activity which promises higher rewards...' (1866, p.1034).

The labourer is willing to enter any labour process where the wage is higher. By the same token, it is in the interests of the potential labourer (and the labourer through re-training) to participate in and assent to the development of their mental capacities as this will allow them greater choice and freedom in the labour market with possibility of greater financial rewards and in a tight labour market increase employment chances. Therefore, from the perspective of the individual potential worker it may make sense to actively and positively participate in the development and production of certain mental capacities within themselves. As Finn (1987) has noted, workers do have a real interest in education and training. However, as Marx notes, the real active participation of potential wage labourers in the production of their labour power takes a terrible twist in certain circumstances, viewed from the perspective of the class of wage labourers as a whole. In 'Wages' Marx points out that from the point of view of capital as a whole, if the labour power of workers was developed to the point where all of them could take any job, then this would lead to a general fall in wages as there would be no skill shortages (1847b).

Secondly, a number of analysts have pointed to the educational exchange (Willis:1977; Sarup:1982; Brown:1987a) where pupils are promised jobs, good reports, good grades, if they work hard in class. There are incentives for them to participate in the social production of their own labour power. These incentives can break down. In the case of Willis' lads (1977), it was held by the lads that the educational exchange was based on a false premise; you could get jobs without participating positively in the classroom. In Brown (1987a) it is pointed out that the ordinary kids in his study were only likely to accept the educational exchange as long as 'decent' working class jobs for youth were available. Thus, gaining the assent of potential labourers in terms of their active and positive participation in the production of their own labour power is always conditional on whether potential labourers perceive it in their interests to give this assent. The

social production of labour power takes place through struggle, incorporation and compromise and it ultimately revolves around the formation of aspects of the consciousness of potential labour power.

Thirdly, labourers can subvert the production of labour power (Education Group:1981) through diverting the mental capacities developed towards undermining capitalism, through reading socialist literature and propaganda. Insofar as the literacy skills are developed within the consciousness of potential labourers there is no guarantee that these skills will be used in the service of capital, or only within the labour process. Insofar as mental capacities are produced they are never fixed, stable, objectified entities within the consciousness of potential workers. In recent years, the contradiction of the objectification of subjectivity has reached new heights. Agents of capital have taken new steps in the attempt to produce certain attitudes (especially work attitudes) and personality traits within potential and actual labour power. This point raises the issue of what Marx meant by mental capacities.

Mental Capacities: the Inclusion of Attitudes and Personality Traits

Marx's characterisation of labour power referred to earlier was open-ended, general and broad. This was reasonable as the mental and physical attributes required for different forms of labour power would vary, depending on the roles to be performed in the labour process. The concern here is with mental capacities, and what might be included. The capacity to do certain calculations, to read certain words, to understand aspects of science might be readily admitted. But the production of certain attitudes, personality and character traits is more contentious.

Conventional sociology acknowledges this occurs, but that it happens mainly through the effects of the hidden curriculum. What is involved here in the production of attitudes and personality traits as attributes of labour power is that it is something intentional, entirely on the surface, and not hidden in the rules, conventions, ideology and interpersonal interaction within the milieu of the school or training school. Apprenticeships have always been

about the formation of a certain set of work attitudes and personality type, summed up in the term 'craft pride'.

Over the last thirty years in Britain, and especially over the last ten years, the production of attitudes and personality traits as attributes within labour power has taken a new turn. It has become more pronounced with special institutions and organisations being set up to vigorously pursue this end. The managers of these new organisations do not say they are producing attributes of 'labour power', but what they do amounts to this. Since the late 1950s character and attitude development have gained an insidious hold in the social production of labour power, a hold which justifies seeing this as a qualitatively new phase. The social production of labour power has taken on a far more clearly definable, organised and expanded form in terms of the development of attitudes and personality traits. Here we need only outline pertinent developments.

From the ending of National Service in 1958, managements in some of the 'enlightened' large British companies (for example, Cadbury, ICI), divined a need to train the character of young recruits in order to approximate the effect of the former National Service, (especially in terms of work discipline, loyalty, commitment to the organisation). From the early 1960s there appeared the rise of organised, professionally-run 'character training schemes'; the pages of 'Personnel Management' (Institute of Personnel Management Journal) and 'Industrial Society' (Journal of the Industrial Society) over the 1958-72 period attest to the existence of what I have elsewhere called a veritable 'Character Training Craze'.^[7] A concern with the character of young recruits to industry was prevalent in the pages of these journals in the inter-War period (Fee:1920; F.E.F:1921; Schofield:1923; Marsh:1925; are just a few examples), but apart from a fascination with getting young workers involved in the Scouts and Girl Guides there was little reference to systematic character training. This was despite the fact that character training was well to the fore in Government schemes for unemployed youth in the late 1920s and 1930s. Rees and Rees (1982) and Horne (1986) have shown how Juvenile Unemployment/Instruction Centres included aspects of character training. There was some training in

residential camps and 'reconditioning camps' with physical training, games and swimming and handiwork which aimed to build up character as well as physical strength under the Juvenile Transference Scheme (Rees and Rees:1982,pp23-25). The character training schemes run for youth in work in the 1960s shared certain elements with these early inter-War Government schemes. These schemes often incorporated residential weekends and even whole weeks for young workers, where '...physical challenge, adventure, service to the community and comradeship'(Reay:1963,p.80) were to the fore. Some schemes included young people going abroad, going on Outward Bound courses and other types of 'adventure training'. As P.H. Reay, of Cadbury's put it, the aim of the Cadbury course was to:

'...provide in microcosm, over a much shorter period..[than that of National Service:GR]..some of the broadening and enlightening side effects of conscription.' (ibid.).

Private companies such as Adventure Unlimited (Ward:1965) and the Lindley Lodge Centre (Marsh:1973) were set up to cater for the character training craze. Large firms were increasingly setting up their own courses supervised by training and personnel staff. The Duke of Edinburgh Award Scheme became a common feature of these schemes and the Industrial Society was itself involved in 'character training' through setting up Youth Forums providing social activities and local youth pressure groups.

As the British economy started to falter in the late 1960s and early 1970s the Industrial Society called for state or local authority aid for these schemes as firms started to cut back on their commitments to character training. The Industrial Society argued that the state could promote 'attitude training' through the Industrial Training Boards that had been set up under the 1964 Industrial Training Act (Industrial Society:1971). The bubble burst in another sense. In 1972, a critical article appeared in 'Personnel Management' which put an end to the promotion of character training schemes in that journal. White and Roberts (1972) challenged the basic assumptions of character training schemes through a study of 77 young people who had been on them and concluded that they failed to develop the character of young people in the ways that their protagonists proclaimed.

They compared the orientations of these 77 to their work before and after attending character training courses. In particular, they examined whether these young people were putting '...more effort into and deriving greater satisfaction from their working lives..' (p.32) after attending the course. The answer was either that the course made little difference or it had marginal negative effects (from the employers' viewpoint); indeed, it made participants more restless, less likely to put effort into their jobs and more likely to want to change their jobs or leave the firm altogether. Significantly, it did not instil a more co-operative attitude towards their supervisors; relations with supervisors deteriorated after attending the course (ibid.). There was an aggressively spirited defence of character training scheme in 'Industrial Society' in 1973 (Marsh:1973), and these schemes were not ostracised from this journal. However, this attack on character training had come too late; it was firmly established by 1972. Since 1964, large firms had started to incorporate character training in various forms into their off-the-job training schemes for apprentices.

Character training and attitude training was brought in on a far larger scale in the late 1970s through the Youth Opportunities Programme and in the 1980s through the YTS. I have no data on the numbers of young people who went on character training courses, but it seemed largely confined to young unskilled and semi-skilled people in 'enlightened' large firms in the early 1960s, spreading to apprenticeship training after the 1964 Act. The arguments of the Industrial Society that attitude training should be given state funding became a reality through the MSC schemes for unemployed youth from the late 1970s. The emphasis on making unemployed young people better potential employees through social and life skills courses, trainee assessment and residential courses along the lines of the old character training schemes (involving Duke of Edinburgh, Outward Bound, City Challenge and other schemes used by the old character training) and generally attempting to reconcile youth to low paid work has been documented in a number of works (Rees and Atkinson:1982; Dale:1985; Benn and Fairley:1986; Brown and Ashton:1987; Finn:1987). What these writers missed is that these developments were part of a new phase in the social production of labour

power in British capitalism where far greater emphasis and resources went into the development of personality traits and work attitudes desired by employers. Finn (1987), for example, misses the point when he argues that the YTS is a poor substitute for proper training and apprenticeships. Its point is that it concentrates more squarely on certain aspects of the production of what Marx called mental capacities; the production of certain work attitudes and personality traits as attributes of labour power. The Education Group (1981) have a better grasp of the situation when they argue that MSC schemes for young people are about 'moulding the subjectivity' of unemployed school leavers (p.235). The early character training schemes and the Government inter-War schemes provided a model for these developments.

In schools, there has been a renewed emphasis on instilling specific work attitudes in terms of encouraging young people to want to work in industry and commerce. Through the TVEI programme, the proposed City Technology Colleges, CPVE, work experience courses and revamped careers education the emphasis is increasingly on young people having favourable work attitudes towards industry and commerce - to esteem industry (Bates:1984).

Finally, studies of employers' labour power needs at the point of recruitment have generally placed work attitudes to the fore. Employers look for certain work attitudes in young recruits above anything else - this point was discussed in detail in Chapter One. A reading of the Institute of Personnel Management and Industrial Society journals from the First World War shows that employers have always put work attitudes and personality traits well to the fore in defining the sort of youth recruits they were looking for and the sort of young people the schools ought to be producing.

The empirical evidence suggests that the production of work attitudes (but also, it will be argued later, certain social attitudes), and personality traits as attributes of labour power can be included in the constitution of labour power and figure as labour power needs. Agents of capital themselves see this point as they produce labour power and as they define their labour power needs and in this they are in advance of some Marxist writers who concentrate on the educational needs of capital (Finn:1987). Thus, mental

capacities can include attitudes and personality traits as well as learned skills and general intelligence in my conception of labour power. The fact that the actual work attitudes and personality traits are partly, even mainly, the result of processes deriving from class subcultures, family life and other social spheres alters nothing. All this shows is that this aspect of the social production of labour power is very underdeveloped, not organised in a clear and definite form. This in turn reflects the essential contradiction: the attempt to fix work attitudes and certain personality traits as attributes of labour power.

Having discussed the nature of labour power the next step is to examine its social production. This must start by grasping the essential features of the social production of labour power, its constituent elements. Again, discussion starts with Marx. Marx addresses the social production of labour power typically when he discusses the value of labour power. He also distinguishes it from another social process; the reproduction of labour power. It is to these issues we now turn.

(iv) The Social Production and Reproduction of Labour Power

These processes are not identical and must be carefully distinguished. They have typically either been conflated or confused, or the distinction between them ignored. The terms are not interchangeable. Few argue (the correct position) that schooling and training are about the production of labour power. Sarup (1982) takes a consistent line on this, as does Yaffe (1976). Marxists more generally talk about capitalist schooling and training in terms of the reproduction of labour power. The Education Group (1981), for example, examined the interventions of the MSC in terms of the reproduction of labour power. In view of the distinction Marx makes between reproduction and production of labour power and the distinctions made later in this section this is unacceptable. Harris (1982) is adamant that schools are the key institutions in the reproduction of labour power. Sharpe (1980) and the Revolutionary Marxist Tendency (1981) argue a similar line. It depends on what reproduction means.

A number of claims have been made about schools being involved in certain reproductive processes. For example, it has been claimed that schools are involved in the reproduction of the bearers of labour power (Harris:1982), the reproduction of the capitalist labour force (Hextall:1980; Rosenberg:1987), the reproduction of gender divisions (Deem:1980a, 1980b, 1980c; MacDonald:1980), the reproduction of managerial classes (Sharpe:1980; Apple:1985), the reproduction of the social relations of production (Bowles and Gintis:1976; Sharpe:1980; Simon:1980; Education Group:1981; Sarup:1982; Apple:1985;), the reproduction of the wage labourer and the market relation between capital and labour (Revolutionary Marxist Tendency:1981), the reproduction of the working class (Kay:1979; Education Group:1981; Willis:1987), and the social reproduction of capitalist society as a whole (Jenkins:1983; Apple:1985;). In terms of some of these reproductive processes schools do play a role, but in terms of the reproduction of the labourer and his/her family through the consumption of goods deriving from the fruits of wage labour they do not. Those who use 'reproduction of labour power' generally omit saying what reproduction means.[8]

Finally, there are those who either use reproduction/production of labour power interchangeably as though it does not matter which is used, those who do make the distinction but do not think it worth elaborating, and those who are self-consciously agnostic on the matter. In the first camp, for example, are Lovejoy, Bedale and Halford (1980), who use the terms almost at random. Matthews (1980), who argues that the Marxist theory of schooling is basically concerned with the the production and reproduction of labour power (p.185) is in the second camp. He does not note any differences in these processes. Thus, it is no surprise when his section on 'Schools and the Production of Labour Power' is actually about the reproduction of the productive forces and relations of capitalism (ibid.p.191). Nash (1984) takes an agnosticist line; labour power is (re)produced. Marxists writing on schooling and training do not seem to see a problem in sliding between notions of the production and reproduction of labour power. But these different concepts refer to different social processes. To confuse and

conflate these categories involves a misappropriation of capitalist social reality. It involves a theoretical error on the grand scale. A return to Marx makes these points clear.

Labour power, like all commodities, has a value. It is determined like other commodities; '...by the labour time necessary for the production and consequently also the reproduction, of this special article.' (Marx:1867,p.167). Insofar as it has value, '...it represents no more than a quantity of the average labour of society incorporated in it.' (ibid.). This second point pertains to the value of all commodities. Why does the socially necessary labour time which determines the value of commodities, including labour power, resolve itself into average labour power?

An apparent oddity of the determination of the value of commodities by labour time is that it might seem that the lazier or more unskilful the worker the more time it would take to produce a commodity and hence the greater its value (Marx:1867,p.46; 1865b,p.71). Yet the lazy or unskilful worker is not producing his commodity within the time that is socially necessary for its production. The value of any commodity is measured by the socially necessary labour time taken for the production of a commodity, not its absolute time. Our lazy or unskilful worker is relatively inefficient in the production of value as her/his commodity takes longer to produce than is socially necessary. Socially necessary labour time is the labour time:

'...required to produce an article under the normal conditions of production, and with the average degree of skill and intensity prevalent at the time.' (Marx:1867,p.47).

It is based on average labour power at work under normal conditions within each trade. Each commodity within a particular trade $C_1, \dots, C_2, \dots, C_n$ takes a certain amount of socially necessary labour time to produce given these conditions of average labour power and normal production. Thus:

'Each individual commodity, in this connexion, is to be considered as an average sample of its class.' (ibid.).

Labour power is no different here. Its value is determined and measured by the socially necessary labour time taken to produce it, assuming average

labour power and normal conditions within the sphere of the production of labour power. This determines the value of labour power within specific branches of production. In terms of a particular society, the value of labour power is determined by '...the value of the necessaries of life habitually required by the the average labourer.' (Marx:1867,p.486). Skilled labour will of course take longer to produce than what Marx calls simple average labour (Marx:1867,p.51), but the general conditions still apply, although from the point of view of society as a whole skilled labour power only figures insofar as it plays a role in fixing average labour power.

It should be noted that Marx says that the value of labour power is determined by the socially necessary labour time involved in the production and reproduction of labour power. Labour power is different in this respect from other commodities. He refers here to two distinct but related social processes. The reproduction of labour power is examined first, as this conception dominates in Marxist writings in the sociology of education. In fact it has little to with schooling.

In the first instance, the reproduction of labour power is concerned with the reproduction of the labour power of specific labourers whose labour power is consumed in the labour process. The labourer has to sell her/his labour power to the capitalist in order to live and her/his reproduction consists in '...his reproduction of himself.' (Marx:1867,p.167). And for the reproduction of her/himself s/he requires '...a given quantity of the means of subsistence.' (ibid.). The socially necessary labour time for the reproduction of labour power is that necessary for the production of these means of subsistence, the 'bundle of commodities' that allow the labour power of the labourer to be consumed once more in the labour process the next day or next week. Thus, 'His means of subsistence must therefore be sufficient to maintain him in his normal state as a labouring individual.' (ibid.,p.168). What is included in the bundle of commodities, and hence the value of her/his reproduction, is determined by the class struggle, and historical (cultural, custom) factors. The wage, the price of labour power, is regulated in its lower limit by the minimum necessary to purchase the means of subsistence necessary for the reproduction of the

labour power. The reproduction of labour power takes place outside the labour process, (mainly in the family, but also other social sites where consumption of the means of subsistence takes place), and indeed outside the process of commodity production altogether (Marx:1866,p.1004). From the standpoint of society:

'...the reproduction of the worker himself by his individual consumption forms part of the reproduction process of the social capital.' (Marx:1878,p.285).

Capital has no direct control of the process of reproduction at all (de Brunhoff:1978,p.9).[9]

On the other hand:

'In order to modify the human organism, so that it may acquire skill and handiness in a given branch of industry, and become labour power of a special kind, a special education or training is requisite, and this, on its part, costs an equivalent in commodities of a greater or less amount. This amount varies according to the more or less complicated character of labour power. The expenses of this education (excessively small in the case of ordinary labour power), enter pro tanto into the total value spent on its production.' (Marx:1867,pp168-169).

This modification of the individual through education and training in terms of the requirements of a particular branch of industry, approximates to the social production of labour power in capitalism. It falls within the process of commodity production and it also takes place within the control of capital to varying degrees. Marx differentiates it clearly in the above extract from the reproduction of labour power. He defines reproduction and then social production of labour power systematically on the same page (1867,p.168) of 'Capital'. Both reproduction and social production costs enter into the total spent on the production of labour power.

Marx differentiates between the reproduction and social production of labour power in a number of contexts, but does so most often and most decisively when he examines the costs involved in these processes. For example, in his discussion on the commercial wage labourer he clearly distinguishes between the cost of the social production of this specific form of labour power and the cost of its reproduction (1865a,p.292). But his clearest and most obvious distinction, the one which first alerted me to the social processes

involved in the social production of labour power, comes in 'Theories of Surplus Value Vol.III' (1863c). There Marx asks the question: what does the labour required for the production of labour power consist of? There are two types of labour involved:

'Apart from the labour involved in developing a person's labour power, his **education, his apprenticeship** - and this hardly arises in relation to unskilled labour - its reproduction costs no labour apart from that involved in the reproduction of the means of subsistence which the labourer consumes.' (1863c, p.148 - my emphasis).

This is the seminal distinction between the social production and reproduction of labour power. Marx makes a similar distinction elsewhere; (1847a, p.158) and (1858, pp.323-324), for example.

Having set out the differences between the social production and reproduction of labour power it is necessary to draw out certain phases within both processes. It is essential to specify which of these phases the thesis refers to. The next section makes the required distinctions.

(v) Phases in the Reproduction and Production of Labour Power

What was described as the reproduction of labour power in the previous section is its second phase. There are two phases in the reproduction of labour power corresponding to the life-cycle of the labourer. The reproduction of the worker through individual consumption forms part of the reproduction process of the social capital (Marx:1878, p.285). But there is another part, a first phase.

This first phase is also included in the determination of the value of labour power. It is the upbringing of individual members of the future working class, the children of wage labourers (Brewer:1984, p.37; Kay:1979, p.35). An element enters the wage of the adult labourer in order to ensure this first phase of reproduction which ends when young labourers enter the labour market and attain a wage which enables their own reproduction. There may well be a period when a young labourer enters the labour market but does not get a sufficient wage to cover her/his own

individual reproduction as labour power. To this extent s/he is dependent on her/his parents. The first phase of reproduction truly ends only when s/he can reproduce her/his labour power independently, from the point of view of the determination of the value of labour power. As a social process it ends the moment s/he enters the labour market. There is a real transition involved here. As Marx noted:

'The labour power withdrawn from the market by wear and tear and death, must be continually replaced by, at the very least, an equal amount of fresh labour power. Hence the sum of the means of subsistence necessary for the production of labour power must include the means necessary for the labourer's substitutes, i.e. his children, in order that this race of peculiar commodity-owners may perpetuate its appearance in the market.' (1867,p168).

Again, this first phase of the reproduction of labour power takes place outside the sphere of production, largely within the family, outside the control of capital, although the capitalist state intervenes in the process in a variety of ways in developed capitalism through processes pertaining to the maintenance of labour power.[10]

There may also be two phases in the social production of labour power. The first phase, which the thesis works within, is the initial social production of labour power up to the point that it reaches the status of average labour power within a particular trade or job - when it becomes fully developed labour power. At this point, from the perspective of the value of labour power, the initial first phase of the social production of labour power has ceased, although in relation to fixing this social average those labour powers developed beyond the social average must, as a matter of logic, enter in. As a social process the social production of labour power may continue in relation to individual labour powers as some are produced to a level above the social average. First, the capitalist may invest in training to raise the quality of her/his labour power above the social average for the trade or type of work as a deliberate strategy. Secondly, and more commonly, a particular labour power may develop beyond the social average spontaneously through the development of its attributes in production. The capitalist pays nothing here. This makes it tempting for the capitalist not to invest in definite attempts to raise the quality of her/his labour power.

The social production of labour power continues throughout the life of the labourer. It has no precise limits, as labour power has an unbounded nature which precludes setting upper limits to its quality as an individual labour power. Labour power can also deteriorate in quality, and always does in some respects over the lifetime of the labourer, especially physical attributes declining through ageing. But the important point for the capitalist is to raise the quality of labour power, absolutely and in relation to competitors. If a young labourer leaves before her/his labour power develops to the point of average labour power, this changes nothing; the first phase of the social production of labour power has ended, no matter how well her/his labour power has developed. For when s/he starts her/his next job, some of the mental capacities and perhaps physical capacities have already been socially produced up to a point. Where a labourer stays in the same job all her/his life, and the nature of the job does not change (in terms of the attributes required of labour power to do the job), then the labourer only ever reaches the first phase - an increasingly rare phenomenon.

The second phase, (composed of a whole series of sub-phases where the labourer has many jobs) consists of the labourer changing jobs and having to attain the status of average labour power all over again. This occurs on the basis of labour power already developed in the first phase. This is retraining in conventional terminology, but with a difference. It involves 'retraining' even where there is no formal training programme, and the period involved ends when the labour power of the labourer attains the average for the new type of work. Also, to the extent that a labourer stays within her/his job or trade, and the job changes (say through the introduction of new technology) s/he also goes through a further phase where her/his labour power is being socially produced. Insofar as these subsequent phases of the social production of labour power involve formal training or informal instruction they involve a cost to the capitalist and must be included in the determination of the value of labour power. This becomes particularly pertinent if the labour process is going through rapid change resulting in a change in the very nature of the average labour power

employed within specific jobs and within that branch of industry as a whole. Having examined labour power and differentiated its reproduction from its social production it is now possible to examine the first phase of the latter more closely. This is important in order to appreciate the social location of the recruitment process for school leavers. Its place in relation to the social production of labour power has consequences for the criteria of recruitment.

(vi) The Social Production of Labour Power: Its Elements

The social production of labour power is ultimately the social production of the attributes of labour power. This is what is actually produced. It does not take place just within schooling. In developed capitalism it includes elements of schooling and training (in relation to complex labour power). It also includes the development of labour power within the labour process. Individuals develop their abilities in the labour process (Marx:1857,p.90). Schooling, training and the development of labour power in the labour process may themselves be split up into different elements (for example, on and off-the-job training). We are dealing with a fragmented social process. It is not the case, as Marx says, pace Adam Smith, that 'education produces labour power' (Marx:1863a,p.210). Schooling does not produce fully developed labour power.

A number of points require elaboration here. For complex skilled labour, schooling may include either elements of what is commonly referred to as further education or higher education. This institutionally fragments the process of production of skilled labour power even further. Secondly, it is obvious that schooling, particularly up to the end of compulsory secondary schooling is about much more than the social production of labour power. It was previously noted that various writers have argued that schooling plays a role in certain reproductive processes. What this shows is that up to the end of compulsory schooling the social definition and clarity of the social production of labour power is not well drawn. It proceeds within the mix of social processes listed as reproductive processes in the previous section.

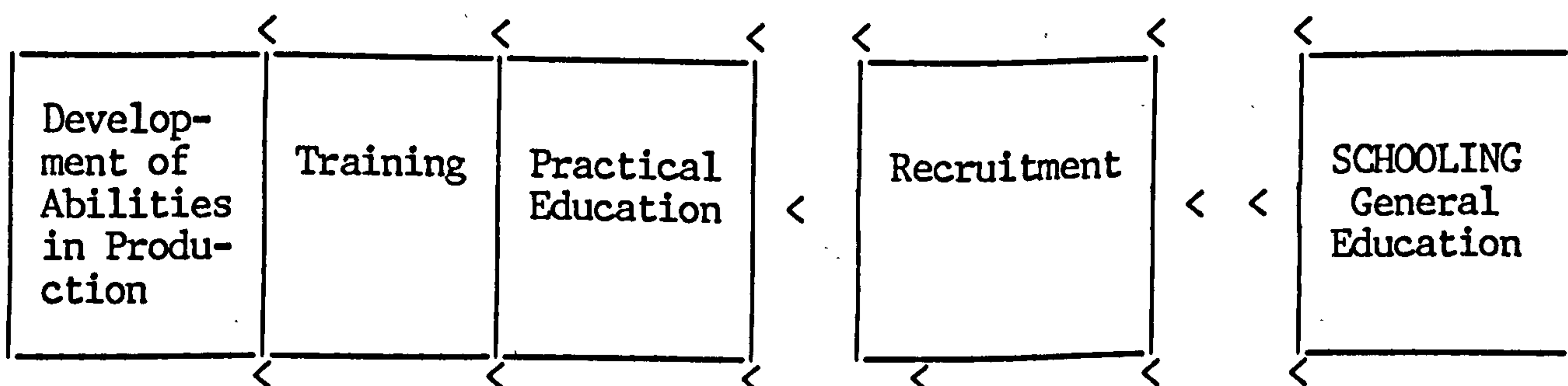
This has certain consequences for the interpretation of the data. These consequences rest on the fact that the process of fixing certain work attitudes and personality traits, from the point of view of agents of capital involved in the recruitment of school leavers, is inefficient and not clearly defined. This lack of definition and efficiency from the employers' perspective gives rise to other elements being included in the social production of labour power. First, employers may attempt to remedy the relative lack of desired work attitudes and personality traits by sending them on character and attitude training courses. This becomes a well-defined and overt element. Secondly, they may place a value on participation in surrogate elements, elements that fulfil a function in terms of having desired effects on the work attitudes or personality traits of school leavers. These elements include things like being in the Scouts, the Boys Brigade and other organisations noted in Chapter Fifteen. They reach work attitudes and personality traits that schooling fails to beneficially affect, according to the employers. Participation in the labour process, the final element in the social production of labour power, contains a number of factors. Unstructured, ad hoc, informal instruction, help and advice from workmates and the use of manuals, instruction sheets and other written material may also be elements. It also includes unsystematic attitude and character training through the work discipline regime. Some of these aspects may be operative in addition to the development of labour power through direct participation in the labour process. It does not include on-the-job training where the young labourer observes or watches what is being done ('sitting by Nellie') or is given work as practise (non-production work) or is directly observed by instructors who guide the young worker through various aspects of the work in a systematic fashion. This is training; another element of the social production of labour power. The development of abilities in the labour process is a low-level form of the social production of the labour power. It takes place entirely within the orbit of capital. It is largely free. Only simple labour power is socially produced through this form. It becomes a social reality most clearly in what Marx called the manufacturing phase of

capitalism with the social production of the labour power of the detail labourer. There labour power was produced in a very one-sided way, with emphasis on the speed of manual dexterity, whilst other attributes of labour power of the detail labourer remained undeveloped. Indeed, Marx talks about the mental, moral and physical degradation of the worker in this phase (Marx:1867,p.253,p257). Yet aspects of this process are still significant in the social production of semi-skilled and unskilled labour power in modern Britain.

All this shows that the social production of labour power is a highly fragmented process. From the point of view of the thesis, the splitting off of schooling outside the control of individual capital has particular consequences for the interpretation of the data. With this point in view the elements of the social production of labour power can now be outlined.

Figure 2.1 shows the complex form of the social production of labour power.

Figure 2.1 : The Social Production of Labour Power: Complex Form in Modern Industry



It is complex because the recruitment process intervenes between general schooling and the rest of the process. In its elementary form, which hardly arises in capitalism (for reasons not pertinent to the thesis), recruitment precedes the whole process of the social production of labour power and the whole process is under the direct control of capital. The problem is trying to understand what is basically a fragmentary process. This problem can be solved through reconstructing the unity of the social production of labour power into its basic forms and then examining the contradictions which force the different elements apart. Figure 2.1 shows one of these basic forms.

Here, it is only necessary to examine the four elements of the social production of labour power. The forces making for its fragmentation and the contradictions within the process as a whole are the proper subjects of further research and theoretical development.

The recruitment process is not part of the social production of labour power. It is a labour market institution. We are only concerned with the content of the other four boxes. The fact that the boxes in Figure 2.1 are different sizes is not significant; there is no time scale involved and some of the elements may not exist in relation to simple labour power at all. This is because the process is regulated by the complexity of labour power. It is not in the interest of individual capitals to overproduce labour power in relation to their own labour processes; to socially produce attributes of labour power not required in the labour process. Thus, for simple labour, there may be no requirement for training or practical education, and the general education may play a minute role. For skilled labour, on the other hand, all four elements may be required.

The development of abilities in production has already been specified. Training involves either/both off-the-job elements where trainees are formally instructed in the practical aspects of the work away from the labour process, in training sections or schools or centres, and/or on-the-job elements where observation may be combined with instruction, doing practise jobs or real work under varying degrees of supervision within the labour process. The less familiar distinction between general and practical education requires especial attention. In the phase of what Marx called Modern Industry where relative surplus value production becomes dominant, there are certain forces which engender the need for general education:

'Modern Industry, through its catastrophes imposes the necessity of recognising, as a fundamental law, variation of work, consequently fitness of the labourer for varied work consequently the greater possible development of his varied aptitudes...Modern Industry, indeed, compels society, under penalty of death, to replace the detail-worker of today, crippled by life-long repetition of one and the same trivial operation, and thus reduced to the mere fragment of a man, by the fully developed individual, fit for a variety of labours, ready to face any change of production...' (1867, p.458).

For this, general education becomes a necessity. This is echoed by Bullock and Yaffe (1979) in relation to contemporary capitalism. General education is basic numeracy and literacy first of all, moral education, scientific, arts and physical education divorced from the labour power needs of individual capitals. General education is not biased towards the labour power needs of particular capitals, but is aimed at capital in general. Character and attitude training takes a general form; it nurtures those attitudes and personality traits pertinent to working in capitalist enterprise in general. General education becomes a necessity so that constant retraining can occur (further phases in the development of labour power) on the basis of an already socially produced labour power with its general learned skills as attributes, (especially numeracy and literacy). Furthermore, given international competition, the bourgeoisie within different nations attempts to raise the overall quality of its labour power through general education (Marx:1848,p.117), facilitating the movement of labour power throughout the national capital.

As the need for general education becomes a palpable social reality the split between it and practical education emerges. General education is the foundation of practical education and training. It is a '...base, in the form of the ability to read, write and calculate, for the acquisition of occupational skills.' (Hussain:1976,p.414). As Swift (1977) notes:

'General education is the principal preparation for employment, mainly through equipping individuals to absorb specific training.' (p.15).

Thus, the existence of an education system is a need of capital in general (Aumeerudy, Lautier and Tortajada:1978). Bullock and Yaffe (1979) have argued that in the post-War period, the systematic development of the productivity of labour, the rapid development of the need for new skills and the extended use of new skills '...has meant that a minimum general education is now a necessity.' (p.33). It facilitates occupational mobility and the flexibility of labour power over the whole economy through aiding retraining and the ability to change jobs. As Woolhouse and Haxby (1966) note in relation to running technician courses in engineering, such courses must be founded on a

sound general education as the basis of future flexibility (p.36).

Practical education involves specialisation through emphasis on the knowledge required to work in the labour process within an individual capital. Numeracy and literacy and general knowledge learnt is tailored to the requirements of working within a specific labour process. This proceeds on the basis of general education, which is first of all, basic numeracy and literacy. It also involves the social production of work and social attitudes and personality traits and the development of general abilities and physical qualities pertinent to particular labour processes. Practical education is applied general education. It may also take the form of concentrating on elements of general education that are pertinent to a particular sector or fraction of capital.

The distinction between practical and general education is not hard and fast. Indeed, the Hadow Report (1926) argued that a 'bias' could be given to general education in the proposed modern schools. General education could proceed with the needs of either industry, commerce or agriculture in view (ibid.p.121). Employers and their representatives, especially in Government reports on education and training, have continually debated the relation between general and practical education. The Schools Council (1966) noted that employers wanted schools to concentrate on broad general education leaving vocational subjects to a later stage. Similarly, the Association of British Chambers of Commerce (1979) argued that employers were looking for a basic education which was sufficient to be of value. The Carr Report (1958) argued that it was more important that schools gave a good general education as industry was better equipped to give a vocational one, and noted that employers in the majority of industries researched for the report believed that up to leaving school education should be general. This was argued on the basis of cost; the better the general education the quicker apprentices would absorb training and this would reduce training costs. Other Government reports noted the importance of schools concentrating on general education (Newbolt Report:1921; Goodenough Report:1931; Spens Report:1938). The Carr-Saunders Report (1949) noted the danger of having a practical education for commerce in the schools; this '...must not reduce to too great an extent the

time available for general education.'(p.28). However, Carr-Saunders basically disagreed with the general stance that schooling up to the secondary stage was about general education and argued that the later years of schooling could cater for future careers or further education. Others argued that schools should embark on vocational education in the final years or build in a vocational bias (FBI:1958; Hadow Report:1926). The Spens Report (1938) argued that practical education should only begin once general education had been attained to a certain point. It was not a case of all children starting practical education at a certain point but when as individuals they were ready for it. This debate about the relation between general and practical education has only been in existence since the late nineteenth century in Britain as before then general education hardly existed for the mass of the population. As the Board of Education (1928) noted, the distinction between vocational and general education was a '...comparatively recent phenomenon.'(p.17), whilst the Hadow Report (1926) noted that practical education was only then a possibility due to the lengthening of schooling which provided its foundation through the advancement of general education. The Board of Education (1928) noted that:

'This problem of a general versus a specialised curriculum is one which recurs at every stage of education for commerce and industry.' (p.14).

In sum, the debate about the proper relation between general and practical education reveals different strategies towards the social production of labour power, and specifically where employers, state officials and Government appointees were arguing the line should be drawn between the state and capital in this enterprise.

There can be variation in the degree of separation between general and practical education, but where the separation is fairly clear in concrete terms the latter rests on the former. It is a matter of logic that the literacy skills involved in engineering must rest on literacy skills in general and not vice versa. Training in turn builds on both phases of education through bringing together manual and technical attributes on the basis of relevant practical education as preparation for the final stage - putting all this together in the labour process. Thus, the relation between

the elements in Figure 2.1. (excluding the recruitment process) is both logical and developmental; each stage builds on the other.

When Figure 2.1 is examined it is found that the four elements are arranged in their immediacy to the production of value and surplus value. Thus, the development of abilities in production goes hand-in-hand with the production of commodities in the labour process. Individual capitals are not averse to this as it does not have great cost implications relative to training and practical education. General education has the least to do with the performance of labour and the creation of value. Because of this the capitalist will be reluctant to lay out capital for this element. Individual capital is antagonistic to general education which does not immediately relate to labour power production for the individual capital concerned. This antagonism between the requirements of capital in general for general education and the hardheaded approach of individual capitals towards limiting the social production of labour power in line with their labour processes is at the foundation of the reluctance of individual capital to socially produce labour power on the basis of general education. In general, individual capitals will not take up general education for capital in general. This schism forms the basis of the separation of general education from the orbit of individual capital and raises the possibility of state intervention to ensure adequate general education for capital in general.

Two final points. First, the fragmentation of the social production of labour power determines the social location of the recruitment process. In Figure 2.1, employers are recruiting labour power already partially socially produced. Their recruitment criteria will reflect this. They will have to take into account the differences in the quality of attributes of labour power already partly developed. The form that the social production of skilled engineering labour power takes in modern Britain is far more complex than the form outlined in in Figure 2.1, and aspects of practical education (which largely takes place in colleges of further education) and training (where off-the-job training takes place in colleges or in a group training scheme for small and medium-sized firms) are outside the immediate control of capital. This point raises a second general point. Whilst the costs of

the social production of labour power for individual capitals decline through the intervention of the state and other agencies increases, with economies of scale coming to the fore, their control over the process also decreases. In particular, the primordial splitting away of general education through the establishment of schooling poses particular problems of ensuring that general education remains as practical as possible from the point of view of individual capital as control is at a social distance.

(vii) Summary and Discussion

This chapter has argued that the needs of industry were basically labour power needs. In understanding the latter it was necessary to examine labour power. Through a reading of Marx the nature of labour power was examined. It was argued that in modern conditions it made sense to include work and social attitudes and personality traits as possible attributes of labour power, as classes of 'mental capabilities' in Marx's terms. This examination of labour power also revealed that, although labour power was a commodity, it differed from other commodities in key respects. The most important of these differences was that labour power had a subjective aspect (examined further in Chapter Six). Unlike other commodities labour power has consciousness. This has consequences for its production. Ultimately the social production of labour power, which was distinguished from the reproduction of labour power (which figures in the interpretation of the empirical material in Chapter Eleven), contains the contradiction that capital attempts to fix certain attributes, (mental capabilities or capacities) within the conscious part of labour power as things, to objectify subjectivity itself.

Next, the social production of labour power was described. Its four possible elements were described in detail. Substantial space was given to the distinction between general and practical education as it figures in the interpretation of the campaigns run by the Coventry & District Engineering Employers' Association (CDEEA) to make general education more practical in terms of the engineering sector of capital in relation to the maths taught

in Coventry schools (Chapter Ten). Finally, it was noted that the recruitment process for school leavers comes at a point before labour power has been fully socially produced. It will be seen that this has certain consequences for the attributes sought in applicants at the point of recruitment (Chapter Nine).

What started off as a concern in Chapter One with the needs of industry became a concern with labour power in Chapter Two as it was argued that these needs were essentially labour power needs and hence an understanding of them entailed an understanding of labour power itself. Chapter Two is the first step towards theoretically grasping the basic issues involved in analysis and critique of the concept of the needs of industry. This theoretical development is taken up once more in Chapters Six-Eight with close reference to the empirical material. On this last point, in the original programme of research it was also resolved to research the concrete needs of a particular industry in relation to school leavers to ascertain the extent to which employers were confused about their needs, ignorant of them or stated contradictory needs at the immediate empirical level. It was never envisaged that the thesis should just be abstract analysis. At this point it would seem opportune to examine what my original motivations, concerns and approaches were towards the study of the needs of industry. Chapter Three illustrates the origins of my interest in the needs of industry, the engineering industry and apprenticeships. These original concerns and motivations had a substantial bearing on the research, the focus on particular issues and the final form of the thesis.

Chapter ThreeSETTING THE SCENE: INITIAL CONCERNS - THE NEEDS OF INDUSTRY AND THE RECRUITMENT PROCESS(i) Introduction

The previous chapter expounded part of the theoretical perspective underpinning the thesis. This perspective was forged amidst the interplay between theory and research during 1980-81, when the fieldwork was in full flow, and only assumed a clearly definable form after 1985 when the initial analysis of the empirical detail was completed and the deeper questions, issues and problems of the research emerged. The theoretical view in Chapter Two did not figure as a guide to the fieldwork studies but partially emerged from the latter. This chapter describes the initial concerns which formed the substrata of the fieldwork studies. It takes a step backwards to the questions, issues and problems that formed the basis of the empirical work.

A few autobiographical details are required as the initial concerns of the thesis evolved during the mid-1970s, well before starting research at Warwick. Section (ii) fills in a few essential personal details. Section (iii) examines the question of why the recruitment of school leavers was taken to be the starting point for research. Sections (iv-v) explain why the recruitment of school leavers was examined in relation to, firstly, the engineering industry, and secondly, apprenticeships. Section (vi) brings these various strands together and outlines the overall research strategy informing the fieldwork studies. The main point to be emphasised here is that this strategy focussed on the criteria and methods of recruitment; a concern with the attributes of labour power emerged as deeper questions were posed and the nature of the criteria of recruitment became apparent.

(ii) Autobiographical Notes: Initial Concerns

My initial interest in the transition from school to work did not spring from reading in the sociology of education or work. It evolved out of

following arguments in the daily and educational press [1] concerning the needs of industry, the relationship between school and work and declining standards of school leavers in the aftermath of James Callaghan's speech on education at Ruskin College Oxford.[2] The central themes and political issues of this speech and the resulting Great Debate on education have been extensively summarised by a number of commentators and there is no need to go over old ground.[3] What is important to note here is that my interest in the field did not derive from sociology. Indeed, at the time of Callaghan's Ruskin speech I had little experience of sociology. In October 1976 I started a postgraduate Diploma in Sociology at the University of East Anglia.[4] I came to sociology as a philosophy graduate.

This biographical detail meant that I first viewed the issues and themes - the relationship between school and work, the needs of industry, standards - in terms of the logical connections between competing definitions. What is education? How can the needs of industry be defined? Are the needs of industry and youth compatible? Is the state justified in meeting industry's needs? Such questions, and the sheer entertainment value of following the Great Debate in the press, were the original sparks of the thesis.

As my sociological education progressed through 1976-1977 I began to move away from these original conceptual concerns and concentrate more on social aspects of the Great Debate. From 1977 my interests broadened to include consideration of the nature of the general relationship between education and industry - a topic that was leaping out of the academic journals and into public view with the crisis of youth unemployment - the starting up of the MSC's Youth Opportunities Programme, the publication of the MSC's report 'Young People and Work' (1977) and the continuance of the Great Debate. This more general consideration of the relationship between education and industry came into sharp focus in the Spring of 1978 whilst I was doing a Certificate in Education course at the University of London Institute of Education when I attended a Day Conference entitled 'Marxist Approaches to the Study of Education'. It was held at the Institute and organised by the Open University Schooling and Capitalism Course Team. Papers given by the Course Team were concerned with writers who supposedly gave distinctly

Marxist analyses of education: (Bowles and Gintis, Bourdieu, Bernstein, Althusser). Their presentation of Bowles and Gintis (1976) was particularly lucid and the event inspired me to read 'Schooling in Capitalist America'. As many others have reviewed, summarised and criticised Bowles and Gintis (1976) only the briefest of summaries is necessary here.^[5]

Bowles and Gintis argued that there was a structural correspondence between the social relations of education and production. In concrete terms:

'The structure of social relations in education not only inures the student to the discipline of the work place, but transforms the types of personal demeanour, modes of self-presentation, self-image, and social-class identifications which are the crucial ingredients of job adequacy.' (Bowles and Gintis:1976,p.131).

This structural correspondence, it was argued, was maintained not only at the aggregate level but also in more specific terms in relation to particular levels within the occupational structure. Thus:

'Different levels of education feed workers into different levels within the occupational structure and, correspondingly, tend towards an internal organization comparable to levels in the hierarchical division of labor.' (ibid.p.132).

The second major proposition was that within the context of the correspondence between the social relations of education and the social relations of production the sphere of production was causally dominant. This was viewed as a matter of fact, for:

'...changes in the structure of production have preceded parallel changes in schooling.' (ibid.p.224).

They introduced historical examples in support of this hypothesis. However, they realised that they would have to outline the 'political and other mechanisms'(ibid.p.225) by which correspondence was achieved and maintained. They identified four such mechanisms: the unco-ordinated pursuit of interests by millions, (through class-differentiated family structure and parental intervention in the educational life of their offspring), financial crises, (involving a consequent restructuring and rationalization of state services, including education, to reflect current needs), the intervention of elites (business and military elites in particular) in the Progressive

Movement in education in the States through the media and pressure groups and school boards, and the political struggle along the lines of class interests. These were the '...mechanisms whereby economic interests are translated into educational programmes.'(ibid.p.235).

Sarup (1978), outlined the shortcomings of Bowles and Gintis from a Marxist perspective. With their structural-functional undertones, little reference to Marxist theory, a positivist epistemology, determinist ontology, empiricist methodology, a passive model of man and a corresponding absence of classroom struggle, Bowles and Gintis appeared short on Marxist credentials according to Sarup. Furthermore, as a trainee teacher, and then, from August 1978 as an actual teacher, I found the portrait of the transition from school to work as painted by Willis (1977), which I read shortly after reading Bowles and Gintis, to be more concurrent with reality than Bowles and Gintis' bleak outline. Sarup (1978) argued that what was needed in understanding the relation between education and work was not functional analysis but work which illustrated the articulation between the two elements. It appeared to me, given my prior interest in understanding the debate about the needs of industry, that the recruitment process, (the interviews, tests and other selection methods carried out by employers), was one of the key sites of articulation between education and production. The recruitment process for school leavers was the point at which employers defined their needs in concrete terms through selecting young people according to various criteria. The criteria of recruitment were the crystallisation of employers' needs in relation to the employment of youth.

In 1979 I read two articles which gave further momentum towards my researching the recruitment process; Frith (1978b) and Edgley (1978).^[6] Frith argued that employers were sometimes confused or ignorant about their needs regarding youth labour.^[7] To the extent that this was true then Bowles and Gintis' correspondence was not working smoothly in the British context for if employers were unsure as to their needs this lessened the likelihood that they would be coherently articulated and catered for by the schools. The central message of the Great Debate and the employers' critique of schooling in the press was that there was a positive non-correspondence

in Britain in the 1970s between the needs of employers, as expressed in recruitment requirements, and the ability of schools to translate employers' needs into 'educational programmes' (Bowles and Gintis:1976.p.235). Edgley pointed to the fact that deskilling in the labour process ran counter to the calls for higher literacy and numeracy standards by employers. Did the criteria of recruitment also reflect this apparent contradiction? This question deepened my interest in recruitment.

Prior to starting research at Warwick the above personal experiences and reading led me to form three central questions to be researched: What actual needs do employers have in relation to the employment of schools leavers - what are the criteria of recruitment? How are these needs defined at the level of the workplace and by whom? What are the recruitment methods used and how do they relate to the recruitment criteria? Despite the subsequent deepening and broadening of the research these questions informed the fieldwork studies described in the next chapter. The next section argues for the importance of research into the recruitment process for school leavers independently of these autobiographical details.

(iii) The Focus on the Recruitment of School Leavers

The recruitment process, along with the careers service, and (increasingly), Government sponsored schemes for the young unemployed, are key aspects of the articulation between education and work in Britain in the 1980s. All three are institutional links between school and work, but the recruitment process is the most crucial in terms of employers defining their 'needs'. Recruitment is the articulation between education and work where employers' needs enter through the operation of criteria of recruitment. In the recruitment process for school leavers, the great clearing house for youth labour, employers may not only assess and make judgements on the youth coming forward as applicants but they might also report back, either to their own employers' organisations or to the local press, any problems in recruiting young people (either in terms of quantity or quality of applicants). Employers' organisations may make representations to the local

education authority, appeal to Headteachers, teachers and Government to remedy the situation or expose the 'scandal of illiterate school leavers' in the local press. All this could be done to try to get schools to change so as to more adequately meet employers' requirements. In Coventry all this, and more (including articles in the 'Times Educational Supplement' (TES)[8]) was in fact done. Employers use recruitment of young people as a quality control exercise on the output of the schools.

In Britain in the 1970s there was an apparent non-correspondence between the needs of employers, (the qualities required in young recruits), and the personality traits, learned skills and work attitudes developed in young people through schooling. Employers claimed they were getting second-rate goods from schools,[9] and vociferous employers and representatives of employers' organisations pinpointed this as a central cause of the rise in youth unemployment in the 1970s (Frith:1980a). The problem in their critique, as we saw in Chapter One, was that they were viewed as not being very clear in setting out their actual requirements, what, in detail their needs were. The key point was that if employers could or would not define their needs adequately then on Bowles and Gintis' analysis non-correspondence would be expected. Certainly, the whole chain of translating employers requirements into educational programmes rested on a coherent statement of these requirements. Employers had apparently everything to gain by asserting their demands on schooling in coherent terms; if employers were muddled in their requirements regarding school leavers then it was no surprise that schools failed to meet or even understand them.

It seemed that I needed to encounter employers in a situation where the broadest and most general enumeration of their requirements was operative. The recruitment process was this optimal social situation. Whilst recruiting young people employers were forced to think, to some extent, about what they were looking for in young people. Wider considerations - training, further education, the nature of the labour process, the state of the labour market, the office and shopfloor culture and elements of an ascriptive nature (age, sex, race) were also possibilities for consideration whilst recruiting. By focussing on criteria of recruitment we would arrive at a comprehensive

catalogue of employers' needs regarding youth labour.

However, the criteria of recruitment were not to be the sole focus. The original focus on the criteria of recruitment was broadened further so that the recruitment process itself was viewed as a social process. Taking the criteria of recruitment alone would negate the existence of these criteria as a result of social interaction within the firm and through wider influences (for example, the demands of training boards or technical colleges) which were filtered through into the recruitment process as limitations on employers' choice of recruit, or as important considerations.

The links between the criteria of recruitment and the methods of recruitment were also seen as crucial. Were they consistent? In particular, were employers using recruitment methods likely to select young people according to their stated criteria? Were they placing most emphasis on those methods which aimed to select for the most important criteria of recruitment? If there was a lack of consistency between recruitment criteria and methods such that the latter were not up to the task of gauging applicants in terms of the former then an interesting possibility arose: schools were perhaps producing the goods but employers were buying the wrong products. Non-correspondence would then be based not on schools' failure to turn out young people required by industry and commerce, but employers' incompetence in spotting the type of young person they required in the recruitment process.

These were my initial research concerns: what the needs of employers' were regarding young workers, how these 'needs' were defined (by who and by what processes), how needs were assessed in relation to young applicants (the methods of recruitment) and the wider considerations affecting the recruitment of school leavers. Although these initial concerns were refined and developed they lay at the core of the fieldwork.

(iv) Why Engineering?

The decision to research the recruitment process for school leavers was made

well before starting research at Warwick. However, a strategic decision was required after starting at Warwick on precisely which industry I was going to examine. Different employers appeared to have different needs depending on whether they were engineering, banking or construction employers - they were looking for different types of young people. This point was apparent from reading management journals and comparing employers' statements about their needs.[10]

During the 1920s, and especially during the early 1930s, there were a number of statements in these journals regarding the needs of industry in relation to youth entering employment; the qualities, qualifications and skills deemed as essential by employers for youth to be in possession of as they entered work. These statements were almost universally general. They were statements about the requirements of employers-in-general; skills, qualities that were required for more or less any youth job; vague and general statements of 'needs'. Here is a typical example:

'What we look for primarily is evidence of character, personality, enterprise, and initiative.' (Harrison:1934,p.25).

But after the mid-1930s, and especially after an article by the Principal of a Large Technical College (1936) where it was announced that 'different industries have different requirements' regarding youth, the regularity of general statements about needs declined. From the late 1930s there were few explicit statements concerning what industry required of youth entering work at all. After the Second World War especially, statements about needs were very rare and were usually about the needs of a specific industry or trade. When employers talked about needs from the mid-1930s they were less vague and referred more to specific school subjects and made clearer distinctions between skill levels of youth required. Also there was a switch from stating needs in relation to what schools ought to be doing to assessing needs in terms of what was required on day release and further education courses and internal training programs. These again were typically specific statements with emphasis on subjects to be studied and skills to be mastered.[11]

This reading made it clear that if I was going to research the needs of

industry then it was essential to be specific about what industry I was going to research and what skill level the fieldwork would concentrate on. However, specialisation to this extent would not allow any general statements about what employers in general, across various industries, were looking for in the aggregate. Yet this was not a problem as research on these general aggregated demands was already being carried out in the late 1970s. Comparative data was available elsewhere. There was Finn and Markall's (1981a,b,) research in Salford, Ashton and Maguire's work on the 'Youth in the Labour Market' project and Frith and Buckley's work in Coventry, as well as the MSC research for the 'Coventry Report'[12]. These studies revealed findings on employers' needs across youth labour markets.

There was never any question of choosing another industry other than engineering except for purposes of comparison. The overwhelming reason for deciding to research the needs of engineering employers was that engineering had a dominant role within the Coventry youth labour market. The pages of the City Council's Economic Monitor detailed the importance of engineering in Coventry in the labour market as a whole. Discussions I had with other postgraduate students in the sociology department at Warwick emphasised the relative dominance of engineering in the youth labour market.[13]

Secondly, the local CDEEA had taken a very high profile in the arguments over schools failing to meet industry's needs. The most strident critiques of schooling amongst employers had tended to come from industrial capital (Finn:1987.p.107), and within industrial capital the engineering industry's complaints were well to the fore. What was more, unlike many employers, the CDEEA had carried out research into the matter, claiming to have clear proof that its needs were not being met, and that the standard of school leavers was in decline (Venning:1976; Gilbert:1976,1977; CDEEA:1980). Engineering employers were in the forefront of attempts to influence schools to meet industry's needs, in the public debate in the national and local media, and the Coventry Association appeared to be in the vanguard within the engineering industry.

I was also encouraged by attempts in May 1980 to contact the CDEEA with a

view to having an interview with one of their representatives. Interviews with Roger Gilbert in mid-May, the CDEEA's Training Executive, led to significant contacts within the Midland Group Training Services (MGTS) which was involved in training engineering apprentices for small firms in the area. I obtained access to interview over a hundred apprentices at MGTS through the help of Ken Wardle, MGTS Recruitment Officer. Furthermore, Roger Gilbert supplied me with statistics on apprentice recruitment numbers.

Thirdly, the fact that I had worked as a production worker in a small engineering factory on the Norwich Airport Industrial Estate in 1975/76 also played a part. From this experience I had picked up a few technical terms and I was generally aware regarding what various types of machines were and could do. Finally, the Warwick University Library, and particularly the Modern Records Centre, had an excellent collection of primary and secondary material on the industry. These then were the reasons for choosing engineering; but at what skill level should the study be focussed? Should I examine the recruitment of all young people entering engineering or concentrate on particular groups?

(v) Why Apprenticeships?

Having decided to research the recruitment of school leavers in relation to engineering the decision to choose engineering apprenticeships in particular was determined by two considerations. Firstly, there was the state of the Coventry youth labour market regarding jobs in engineering. In the early 1980s the demand for youth jobs in engineering plummeted, but entry to skilled work in engineering held up well. In 1980, Coventry Careers Service (CCS) data showed that 76% of fifth form leavers entering engineering jobs in Coventry went into jobs involving systematic training lasting more than one year (CCS:1980). On CCS data (CCS:1979b,1978b), apprentices were the largest category of fifth form leavers entering engineering.^[14] Thus, apprenticeships afforded the best research opportunities compared to other groups of young workers in engineering in Coventry. This was not a compelling reason for researching apprenticeships. The second consideration,

my interest in the debates on apprenticeship in management journals, was ultimately decisive.

This interest was built up whilst reading management journals with the purpose of ascertaining what employers said about their needs and their views on young people and the relation between school and work. There was a continuing debate about apprenticeship training in the pages of the journals surveyed.^[15] This debate stimulated me to read more widely on the apprenticeship system. There were three main strands to the debate. First, there were employers and educationalists who argued that in the medium to long-term the apprenticeship system of training would disappear, for a variety of reasons. Secondly, there was an ongoing debate between those that argued that the apprenticeship system still had a role to play in the training of a skilled workforce and those that argued the opposite. The third element concerned the distinction between the old apprenticeship, (where time-serving and learning through watching a skilled man and on-the-job training were the main elements), and the new apprenticeship, (involving a period of systematic training with an off-the-job element) These aspects of the debate are examined in turn below.

(a) Crises in Apprentice Training

A reading of the journals of the Institute of Personnel Management and the Industrial Society yields the view that employers and educationalists have always believed the apprenticeship system to be in crisis, to be on the verge of withering away naturally as it was outmoded, 'feudal' or simply irrelevant to the training of skilled workers in modern industry. Yet prophecies of doom regarding the apprenticeship system, whilst persisting up to the present, have continued to flounder on the resilience of apprenticeships. On closer examination, the arguments put forward concerning the withering away of apprenticeships had a quite specific location: they were based on the view, (widespread in the journals in the inter-War period), that new technology and the mass production system, with associated deskilling, were eroding the need for such a lengthy and elaborate system of

training. As these trends progressed, it was argued, apprenticeships would wither away.[16]

Schofield (1923) argued that attempts to revivify the apprenticeship system were '...threatened at every point under the modern mass production system.'(p.194). Certainly evidence beyond the management journals surveyed suggests that apprenticeship was on the wane between the wars. Penn (1982,p.97) cites an Amalgamated Engineering Union (AEU) survey of 1938 which showed that only 16% of firms engaged apprentices in the engineering industry. Croucher (1982) points to a substantial drop in the numbers of apprentices taken on by federated firms from 78,161 in 1929 to 52,741 in 1933 (p.9). Penn (1982) gives further data revealing the steady decline in the proportion of engineering workers who were classed as skilled from 60% in 1914 to only 32% in 1933, with a rise in the proportion of semi-skilled workers' from 20% to 57% over the same period (op. cit.). Unlike writers in the management journals Penn attributed this not to some inexorable deskilling tendency but the changing balance of industrial power in favour of the employers following heavy industrial defeats in the 1920s and the relatively high proportion of members who were unemployed once the post-First World War boom ended in 1921. Croucher (1982) points to the continued dilution of labour after the First World War and the tendency to split up the tasks of skilled fitters and turners '...down into their constituent operations.' (p.9). These simpler tasks were then given to women and young 'trainees'. The latter were typically shown the door when they were old enough to demand the adult rate. Unlike apprentices, whose indentures placed an obligation on the employer to give a general training, trainees need only be taught a narrow range of operations (ibid.). In the conditions between the wars:

'...it was inevitable that the importance of apprenticeship as the route of entry to the skilled trades declined in importance.'
(Croucher:1982,p.9).

For Butler (1933b), the very 'spiritual essence' of British craftsmanship was being undermined by mechanisation. The high ideals of British craftsmanship were being eroded by the onward march of machine production.

Butler, as Principal of Aston Technical College in Birmingham, believed that it was the duty of the technical college to attempt to preserve this spiritual essence, (which he saw as the status of a 'responsible citizen' - *ibid.*p.xi), in the face of deskilling. Yet, he believed that British craftsmanship was doomed and would fall before the onslaught of modern machine production, for:

'We may be able to preserve the spiritual essence behind the work of the craftsman, but the very nature of mechanical operations today leaves little room for craftsmanship or for pride in one's completed work. Neither manual dexterity nor technical expertise are the same thing as craftsmanship.' (*ibid.*).

Setting aside consistency, he nevertheless believed that the best features of craftsmanship could be maintained, and youths should be trained for citizenship.

Hazell (1934) argued that:

'The practical factory training received during apprenticeship is progressive and invaluable, but the presence of modern day business and the rush of high speed production often make it very difficult for an employer, however conscientious, to give his apprentices in the workshop as much tuition as they need.' (p.34).

Thus, not only did modern day business mean that apprenticeship was irrelevant within the context of a deskilled labour process, but the rush of high speed production where 'time was money' made it increasingly impossible to train apprentices properly. Craftsmen could not afford the time to show apprentices how things were done whilst keeping to a reasonable production schedule. Apprentices could not be trusted to do much work whilst in training - they were too slow. Therefore, Hazell advocated that such training be carried out in technical classes instead. Yet Wilkinson (1931a) believed that the substitution of technical and vocational classes for real work was itself a further threat to the apprenticeship system. The traditional apprenticeship with time-serving and training by the 'sitting by Nellie' method could be replaced by systematic training linked to technical education. But in the conditions of modern business why was apprenticeship necessary at all, argued Wilkinson? The next sub-section looks at some of

the answers given to this question.

(b) Apprenticeship: Feudal Remnant or a Method of Breaking Down 'Alienation' in Modern Industry?

A number of writers castigated the apprenticeship system as an 'obsolete method of training', 'a survival of the feudal period', 'a form of cheap labour' and as an 'inflexible form of training'.^[17] Indeed, argued Bramham (1974), Manpower Planning Officer of British Gas:

'...a manpower policy should not be based on them if we are to make the best use of the people we employ.' (p.32).

This was because there was a five to six year gap between recruitment and effective employment. Therefore, argued Bramham, continued training was needed, devoid of the '...custom and tradition of Apprenticeships.' (ibid.pp32-33). The module system of training, developed since the 1964 Industrial Training Act, could be used to retrain adults. From the educationalists' point of view, Hicks Bolton (1925) argued that the apprenticeships of the late nineteenth century formed a highly educative period in the life of the young person. With mechanisation this was no longer the case.

Writers within the general literature on apprenticeships copiously noted the defects of apprenticeships. Twyman (1944) emphasised the costs, especially supervision costs, and the unattractiveness of apprenticeships to many youth (with evening study and low starting pay). Liepmann (1960) emphasised the 'craft restrictionism' (p.195) of apprenticeship which separates an elite of the workforce off from the rest through the maintenance of differentials '...non-justified by superior skill.' (p.196). Williams (1963) highlighted the constant skill shortages caused by the apprenticeship system, with its overlong period of training, restrictions on age and demarcation between the skilled and the rest. Singer and MacDonald (1970) noted the high cost of apprenticeship training which was exacerbated through wastage; young people leaving before their training had finished. Apprentices were also used as

cheap labour by some employers in their final year.[18]

Others looked upon the onward march of modern machine production as having quite the opposite implications for apprenticeship. In these conditions, it was argued, apprenticeship was more necessary than ever. Butler (1933a) argued that:

'Real industrial progress is not possible unless emphasis is placed on the individual and not the machine.' (p.xvi).

Apprenticeship provided this emphasis, restoring a sense of identity, responsibility and self-respect to the young worker. According to Mitchell (1970), apprenticeship conferred a certain status upon the individual, provided long-term financial gain and a base of solid instruction.

The most spirited defence of the apprenticeship system in the journals surveyed was given by Parkin (1978). Parkin blamed '...the 'alienation' that has spread and is spreading over the industrial face of society' (p.23) on the failure of training systems, skill analysis and job enrichment schemes to provide the intrinsic interest in work. These features of modern industrial life, and the mechanistic deskilled culture they were related to, entailed clinicalised learning of routine skills which destroyed the essential features of craft skill and nurtured feelings of alienation amongst workers. Parkin argued that in response to what he called the 'Machine Theory of Work', which involved deskilling and derived from Adam Smith, the Human Relations Theory of Work had arisen as a result of the loss of motivation arising from the application of the Machine Theory of Work to labour processes. Thus, in the 1970's the controllers of technological enterprise were **ambivalent** between these two strategies argued Parkin, because neither strategy reconciled efficient and effective working practices with an adequate role for the individual within modern life. Parkin's solution was two-fold: first, do not let humans do soul-destroying jobs, (mechanise these jobs); and secondly, reconstitute what he called the Classical Apprenticeship and the Right to Work Creatively.

Parkin listed six features of the traditional craftsman, the 'Master of Destiny', as he called this exalted being, which the Classical

Apprenticeship should embrace. Firstly, there was the autonomy of the traditional craftsman, involving a strong identification with the product, the ability to design, manufacture, repair and maintain the product, adaptability and to be 'master of the whole job'. Secondly, there was the proper rate for the job demanded by the Guilds (within market constraints). Thirdly, there was little or no supervision of the craftsman. Fourthly, it was a self-regulating system; with controlled entry, controlled numbers and standards with indentures which were legally binding. Fifthly, the traditional craftsman was highly regarded in the community. Finally, and most importantly, the craftsman was a self-managing learner, for:

'The apprenticeship system did not produce a mechanistic level of skill. Instead, the apprentice absorbed the secret (mystique) of self-generating skill.' (ibid.p.24).

The Classical Apprenticeship was to be reconstructed with these features in view. Modern clinicalised methods of learning skills destroyed the essential features of craft skill, argued Parkin, and:

'In the process it may well have seriously weakened the cohesion necessary to preserve the essential motivation - the will as well as the skill that is crucial to the performance of any complex job.' (ibid.p.23).

The reconstitution of the craft system and Classical Apprenticeship was the real solution. To re-introduce this system management had to identify key areas of craft skill in jobs not currently recognised as crafts, ensure that all young people became competent in one of those core areas and then accept that ongoing learning was going to be a reality. These were the first steps management must take in the reconstitution of the traditional craftsman and Classical Apprenticeship.

There were no real explanations of why apprenticeships had survived, (Classical or otherwise) in Parkin (1978). Neither were there any elsewhere in articles in the two journals surveyed. Parkin's arguments were about why apprenticeships (of a Classical kind that seemed almost Utopian) ought to survive. This point attracted me to researching apprenticeships, especially as engineering apprenticeships were undergoing something of a renaissance in

the mid-to-late 1970s in Coventry, with numbers recruited on the increase (CDEEA:1981). Recent research has made substantial headway on explanation for the survival of apprenticeship,^[19] and this theme is examined further in Chapter Four. Yet within the journals surveyed there was an indirect, implied explanation for the survival of apprenticeships. Apprenticeships had survived because they became less Classical in Parkin's sense. They had developed into the New apprenticeships, and the Industrial Training Act of 1964, which encouraged these to flower, was the spur to change.

(c) New Apprenticeships for Old.

From the 1930s onwards a number of contributors to the journals contrasted the old traditional apprenticeship with the new apprenticeship, with the corollary that the former would die out and the latter would survive modern machine production. Distilling the notions of old and new apprenticeships down to essentials, the basic contrasts were the following: old apprenticeships were based on time-serving whereas new apprenticeships were based on certain standards of craftsmanship; the methods of training for old apprenticeships were sitting by Nellie and learning by doing, participation in production work and for the new apprenticeships there was supervised off-the-job training in apprentice schools, sections or colleges of further education with qualified training staff; the old apprenticeships had evening classes for technical education, which were not compulsory, whereas new apprenticeship had compulsory day release; where the old apprenticeships put emphasis on the indentures, signed by parents, apprentices and employers, which laid out the duties, rights and responsibilities of all three parties, the new apprenticeship placed more emphasis on the attainment of formal qualifications such as City & Guilds; methods of entry to old apprenticeships were through trade unions or informal links (for example, sons of employees), whereas entry to new apprenticeships was more scientific, involving tests, structured interviews, appropriately designed application forms and stipulated qualifications in the recruitment process.

The features outlined above were not meant to describe the actual state of

apprenticeships between two points in time. Rather, they were ideal types used by the authors in the journals to illustrate the development of apprenticeships over the period. It was generally acknowledged by most authors who made interventions in the apprenticeship debate that the shift from old to new apprenticeships started in the 1930s. Butler (1933a) was the first to use the term 'new apprenticeship'. The shift to new apprenticeships was uneven. In some large enlightened firms the change had taken place before the Second World War. The 1964 Industrial Training Act was designed to speed up the shift. As Smyth (1964) noted, those who stuck with the old apprenticeships would be financially penalised by being refused training grants, yet would still pay a levy of a percentage of the firm's payroll. He expected old apprenticeships to wither away. Elements of the contrast between the old and new apprenticeships were built into the fieldwork studies, and Chapter Four provides some data on this contrast within the Coventry context. Chapter Twenty-one provides analysis of the use of informal networks in the recruitment of apprentices.

The Apprenticeship Debate in these journals stimulated my interest in the area of training for skilled work. In particular I became interested in why apprenticeships had survived in general and the extent to which contemporary apprenticeships had become new apprenticeships and why old apprenticeships had survived. To a limited extent these additional interests were incorporated in the fieldwork studies.

Another decision I had to make was which type of apprentices I was going to research. It seemed to me, after having read Gorz (1976a,b) and Sharpe (1980), who both emphasised the importance of education in creating the split between mental and manual labour in capitalism, a contrast of the recruitment of craft and technician apprentices would be pertinent. Hence, researching the needs of engineering employers would be carried out at the very point, the recruitment process, where the mental/manual divide took on its first concrete expression. The extent to which the criteria of recruitment, and indeed the methods of recruitment, varied between the two groups could be ascertained.

(vi) The Overall Research Strategy: A Needs of Industry Perspective

The actual strategy was very simple:

1. To discover what employers needs were; what qualities, qualifications, attitudes and so on they were looking for in potential young recruits.
2. How these needs were defined; by whom and and by what social processes.
3. To research **recruitment** as the key site where employers' needs were defined as manifested in:
 - the criteria of recruitment that were utilised,
 - the methods of recruitment used, (procedures, personnel involved),
 - and,...to discover the relative importance of the various criteria of recruitment and methods of recruitment, and to search for relationships between the two.
4. All the above to be examined within the context of the engineering industry.
5. All the above points to have special reference to the recruitment of craft and technician apprentices.
6. All the above points to be related to the situation pertaining in Coventry, as far as possible.

This strategy, which was a distillation of the initial concerns outlined in the previous sections and informed the fieldwork studies, took certain things for granted. It assumed that in researching the criteria of recruitment employers' needs were being discovered. Chapter Two noted that the criteria of recruitment are basically references to attributes of labour power. Secondly, it was argued there that the notions of the needs of industry and employers' needs, as used widely by writers on the new transition from school to work as well as by employers themselves, are incoherent. There can be no such thing strictly speaking as employers' needs regarding labour power, as labour power is a fluid entity and what employers require of labour power is not something fixed and static. Discourse set around employers' needs introduces a false functionalism, as though they could actually be satisfied. As it will be argued later, the idea that

employers' labour power needs could be satisfied does not take into account the nature of labour power and its inherent contradictions, and neither does it make sense from the point of view of capital. These points are developed in Chapters Six and Seven.

None of this invalidates the actual research strategy pursued. What does alter are the assumptions underlying the interpretation of the material. The concern is not so much with identifying static labour power needs but rather with the identification of attributes of labour power. The full set of attributes identified, as we shall see, points to irreconcilable contradictions in the social production of the attributes of labour power, contradictions which make any notion of the possibility of any absolute fulfilment of labour power needs impossible. When I embarked on the fieldwork studies in the summer of 1980 these points were not apparent. The whole orientation of the research was stuck in what might be called a needs of industry perspective. In this perspective, what employers say they require of young people appears capable of fulfilment. In terms of research, it is just a question of identifying the criteria of recruitment to see what schooling has to produce in order to meet employers' needs.^[20] The consistency of these statements of needs could also be examined. Part Two gradually moves away from this perspective to a concern with the aspects and attributes of labour power.

Having set out the initial concerns which stimulated the research the next chapter examines how these concerns were operationalised within the research programme of the thesis. It describes the fieldwork studies pursued. Right from the start the analysis of the needs of industry was seen as both a theoretical and empirical enterprise. It was envisaged that the thesis would be simultaneously about conceptual analysis of the needs of industry and empirical analysis of actual needs as expressed by employers, as it was hoped that these analyses would be mutually enlightening.

Chapter FourSETTING THE SCENE: THE FIELDWORK STUDIES AND MIDLAND GROUP TRAINING SERVICES(i) Introduction

Chapter Three set out the guiding threads and general motivations behind the thesis. This chapter describes how these were operationalised. It deals with the particular research methods and fieldwork studies deemed necessary to meet the requirements of the overall research strategy described in the final section of the previous chapter. Only the main fieldwork studies are described here; other studies carried out as part of the research for the thesis and other types of information used are summarised in Appendix 1.

A second aim of this chapter is to introduce the reader to Midland Group Training Services (MGTS). This organisation figured crucially in the recruitment of engineering apprentices in Coventry. A third aim is to present some basic findings which simultaneously describe pertinent features of the CEES sample and provide data on the extent to which the sample included old and new apprenticeships as defined in the previous chapter.^[1]

With these aims in view, Section (ii) describes MGTS and its role in apprentice recruitment in Coventry. It is essential to start with MGTS as an understanding of subsequent sections presupposes familiarity with this organisation. Section (iii) describes the Pilot Study; the precursor to the CEES. Section (iv) describes the CEES and aspects of the CEES sample. Sections (v) and (vi) describe the two main studies carried out in relation to MGTS apprentices. The final section briefly describes some autobiographical details which made the writing of Chapter Five possible.

(ii) Midland Group Training Services

Before any research on the recruitment of engineering apprentices in the Coventry and Warwickshire area could commence it was necessary to gain a clear view of the role of the local group training scheme, MGTS. Group

training schemes are consortia of small/medium firms within a locality which, because they do not have adequate resources to train apprentices to required standards themselves, send their apprentices on first year off-the-job training to a training school run by the Group. The training school trains to standards accepted by the relevant training board. Group training schemes flourished after the 1964 Industrial Training Act as small/medium firms struggled to meet the training requirements for apprentices set down by the training boards on their own. A few group training schemes existed prior to the 1964 Act.^[2] After 1964, training of an adequate nature attracted training grants, and as the 1964 Act was gradually whittled down in stature, firms could gain exemption from the training levy after 1973.^[3]

It is not necessary to go into the effects of the 1964 Act on industrial training here, but it should be noted that one of the prime motivations behind the setting up of group training schemes was financial - especially with the efforts to gain levy exemption after 1973.^[4] Small and medium firms which had not previously had apprentice training sections and professional trainers or systematic training, found the group training scheme (GTS) solution particularly useful for escaping training levy. GTSs were especially well established in the engineering industry. In the Coventry engineering industry a GTS run by the local Chamber of Commerce and the Industrial Training Foundation had been in existence before the 1964 Act, starting up in 1960 (CET:16/8/1960).

By the mid-1970s the local GTS for engineering in Coventry was the Midland Group Training Services Ltd., (MGTS). This GTS had been set up in October 1974 through the Coventry & District Engineering Employers' Association (CDEEA) (CET:26/8/1974). It had evolved out of the Warwickshire Training Services Ltd. which in turn had come out of a merger between separate Coventry and Mid-Warwickshire schemes in 1966 (EEF:1971).^[5] In 1969, the Warwickshire Training Services, which still incorporated the Coventry and Mid-Warwickshire schemes, merged with the Coventry Chamber of Commerce/Industrial Training Foundation scheme (CET:19/11/1969). MGTS was formed through the amalgamation and merger of a number of smaller schemes.

In October 1977 the MGTS training centre at Parkside in Coventry was formally opened by Les Huckfield, then Under Secretary of State at the Department of Industry.^[6] Although it was originally set up by the CDEEA, by the late 1970s it was largely autonomous. However, the CDEEA Training Executive, Roger Gilbert, worked half time for the CDEEA and half time for MGTS. This was the main organisational link.

Less than half of all the firms who were members of MGTS were also members of the CDEEA (CDEEA:1980). There were 151 member firms in MGTS in 1980 (MGTS:1980). These firms could be found in a relatively wide area, from Telford and Newport in the west to Leicester in the east, and from Nuneaton in the north to Stratford-on-Avon in the south, but nearly two-fifths (38%) of the membership were in Coventry (ibid.). This concentration was a result of the both the nature of the evolution of the MGTS, which incorporated three Coventry based schemes in its disjointed development as described above, and the high concentration of engineering firms in Coventry.

MGTS was a limited company but also a registered charity. No doubt this latter status gave it certain tax advantages. It was mainly funded through the Engineering Industry Training Board (EITB). Another source of funding was the services that it provided. Additional funding was raised from member firms through fees for various services. These services were of two main types: training and recruitment. On the training side, the main service provided was first year off-the-job training for engineering apprentices. The Parkside Training Centre could accommodate about a hundred engineering apprentices, although when I was there 112 were crammed into the apprentice training sections. These sections incorporated milling, turning, shaping and grinding, fitting, sheet metalwork, welding and fabrication and a drawing office. In addition, there were about 20 places for young operators, although only about half of these places were taken up when I visited the Centre. The EITB funding depended on the number of places filled, hence there was pressure to keep the Centre full. There were also courses for young people entering office work and for supervisors in the engineering industry. As well as this on-site training MGTS training officers supervised the training of 2nd-4th Year apprentices after they had completed the first

year off-the-job training at the Training Centre, or, where firms did not have off-the-job training, they supervised the training for the entire apprenticeship through visits to the firm. This supervision involved the following: visiting firms to ensure that apprentice log books were being completed, that apprentices were being trained in skills to a standard necessary to meet EITB requirements, to arrange appropriate courses of further education and to discuss the general progress of apprentices with representatives from the firm and the apprentices themselves (MGTS:1980).[7] Altogether, in 1979, the MGTS organised the training of 750 young people in their member firms (ibid.). It was difficult to discover the fees charged for the various training services provided by the MGTS. On all matters of finance MGTS staff were very cagey. Here I had to rely on employers in the fieldwork; training fees for each apprentice were £80 per quarter in 1981.

MGTS also provided recruitment services. Engineering apprentices, young operators and office juniors were recruited by MGTS Recruitment Officer Ken Wardle and the training officers who visited the member firms. The procedure for the recruitment of apprentices was particularly important as it had implications for the organisation of the fieldwork. Appendix 2 gives a very detailed description of the MGTS recruitment procedure for apprentices. An outline of this procedure will suffice here.

The MGTS Recruitment Procedure

If young people wanted to apply for an apprenticeship at any of the member firms they were to apply to MGTS in the first instance, and not to the firm. Thus, the first step was to write in for an MGTS form, complete it and send it in, stating which MGTS firm they were interested in on the form. Once MGTS received the form they contacted the applicant's school and asked for a standard school report form to be filled in. From the information on the application form and the school report form some applicants were rejected. The rest were asked to come in and do Birkbeck B1-B5 aptitude tests.[8] Those successful in the tests then came to MGTS for an interview. Interviews were held in the local Careers Centre. An interview record was filled in by

the training officer involved. Those getting through these interviews were then sent to member firms - usually the first firm they were sent to was the one they had indicated a preference for at the top of their application forms. Photocopies of the application form, school report and interview record were sent to the firms where particular candidates were having interviews. The rest of the recruitment process was left to the firm.

The fact that MGTS provided recruitment services for such a large number of engineering firms in the Coventry area posed certain difficulties for the fieldwork, whilst in some respects it simplified the process.^[9] It appeared that two separate interview schedules would have to be designed; one for MGTS and one for non-MGTS firms - to reflect certain similarities in the recruitment process of the former and the relative diversity of the latter. Yet the intervention of the MGTS simplified matters insofar as, once I had obtained the MGTS recruitment procedure from MGTS recruitment officer Ken Wardle, it saved the work of asking MGTS firms questions on such things as the details of tests, application forms and so on. On the other hand, **additional** questions on the extent to which firms followed the MGTS recruitment procedure and how they used the MGTS material sent to them were necessary. After completing the Pilot Study the necessity of splitting the engineering firms to be surveyed into MGTS and non-MGTS, both for data collection and analysis was obvious.

(iii) The Pilot Study

Before carrying out the main study of the recruitment of engineering apprentices in Coventry a Pilot Study was undertaken. This Pilot Study was deemed necessary for a number of reasons; it certainly was not just a routine matter. First, the particular methods of research required testing. These methods aimed to combine quantitative and qualitative methods in a novel way. Quantitative data was required on the firm; the numbers and types of apprentice, the methods of recruitment, training and further education. Comparisons could then be made between sections of firms within the sample and findings from other research. Yet observation of Institute of Personnel

Management and Industrial Society journals had illustrated the shifts of meaning and emphasis that employers placed on various concepts when they talked about what they were looking for in young people. It was resolved to capture these shifts and shades of emphasis. Also, a method flexible enough to go off set questions if the interviewee brought up an issue recognised as important, but which had been not catered for, seemed useful. A very flexible interviewing technique was required. Tape-recorded interviews appeared to meet most of the requirements. However, tape-recorded interviews did pose certain problems. Practice in reading out questions, positioning the tape-recorder and sound control were important, particularly as the noise in some of the factories visited was intrusive. One of the aims of the Pilot Study was to experiment with these technical considerations, as well as to deal with the more familiar problems of constructing an adequate interview schedule. Furthermore, the whole project of combining qualitative and quantitative approaches needed to be assessed.

Secondly, given these methods, a judgement on the length of the interview schedule was crucial. From discussions with Kevin Buckley, a Warwick Sociology postgraduate who had interviewed engineering employees in his work with Simon Frith on the City Centre Project,^[10] it was gathered that employers in the small to medium sized engineering firms did not appear to have much time to talk to sociologists. Those in sub-contracting firms were particularly harassed by the problems caused by the ebb and flow of batch production, according to Buckley.

Thirdly, it was necessary to ascertain if two separate schedules for craft and technician apprentices were appropriate or whether a single questionnaire with comparative elements at key points was adequate. Thus, there were compelling practical considerations behind the decision to undertake a Pilot Study.

Construction of the interview schedule began in the second week of May 1980. By June 13th it was complete. Initially the firms were contacted by letter,^[11] and it was made clear that I would be contacting them 'in the next few days' by telephone regarding the possibility of an interview. A

list of 12 firms was drawn up from a Coventry Careers Service booklet on engineering apprenticeships in Coventry and Warwickshire (CCS:1979a), and from contacts resulting from discussions with Roger Gilbert, the CDEEA Training Executive. Of these 12 firms, seven were in Warwick, three were in Leamington Spa and one was a Rugby firm. Finally, one was a Coventry firm which was interviewed well after the others. The purpose of this was to test out the interview schedule following adjustments after interviewing the previous 11 firms. This Coventry firm was not included in the data pertaining to the CEES as it failed to fulfil one of the criteria of inclusion to the main Coventry study; that the firm should have recruited an apprentice in the five years prior to interview. Interviewing of the first eleven firms started on 17th June 1980 and finished on the 20th August.

At each firm I went through a set procedure, (lasting about ten minutes) explaining the following: first, a potted version of my research aims, details about my own work background and emphasising that the research was for my own personal use (for a Ph.D) and that any publications would use pseudonyms if the firm was referred to. The second point was that I explained that I wished to tape-record the interview, and that the tape could be turned off, (I showed them the button), at any time if the interviewee wished to say something they would rather not have on tape. Nine of the eleven firms had the interviews taped, one refused and the other was not asked as I wanted to test out what it was like writing notes at an interview at a large firm. Few of the Pilot Study firms (unlike the firms in the CEES) availed themselves of the 'pause' button.

After completing the first eleven firms in the Pilot Study and reviewing the results, research methods and the interview schedule,^[12] it was decided not to have a **complete** separation of craft and technician questions. For many aspects (particularly the methods of recruitment) there were no differences. Instead, differentiation was built in at key points. The interview schedule was restructured and various sections and questions were revised/ejected in the light of the Pilot Study experience. The final product comprised three units which maximised flexibility. Unit I was on basic information about the firm. Unit IIa was on apprentice recruitment in MGTS firms, with

craft/technician differentiation built in at key points, and Unit IIb was on non-MGTS apprentice recruitment, again with differentiation.[13]

The revised schedule was completed by Friday 7th November 1980. The following Thursday, the twelfth firm in the Pilot Study was interviewed. It was a non-MGTS firm. This was a deliberate choice as the non-MGTS schedule was the longest. The interview lasted just over two hours, with several digressions off the set questions. The time factor seemed to be in control. A few final adjustments were made and the interview schedule was in its final form. The Coventry Engineering Employers' Study of apprentice recruitment started in earnest on 14th November 1980.

(iv) The Coventry Engineering Employers' Study (CEES) and the CEES Sample

Most of the main practical decisions regarding research methods and orientation have already been referred to in the previous Section (iii) on the Pilot Study. However, a few more important decisions affecting the direction of the research were arrived at between the period of the completion of the Pilot Study and the commencement of the CEES fieldwork. The first of these decisions concerned the geographical area of study. Although it is always referred to as the 'Coventry...Study', in fact firms from Kenilworth, Exhall, Bedworth, Meriden and Wolston were also included. The decision to take in these nearby towns and villages resulted from the pressure of attempting to complete the fieldwork by the final term of the second year due to the fact that a third year grant was not certain. The interviewing was therefore very intense. The inclusion of firms from these outlying towns and villages speeded up the whole operation by cutting down waiting time between interviews in the final quarter of the study when some of the Coventry firms were 'hard to get' through postponing interviews or setting distant interview dates. Anticipating the problem of getting a large enough sample fast enough, a list of firms in these nearby towns was drawn up before commencing the CEES. Nevertheless, two-thirds of the CEES sample firms were inside the Coventry City boundary.

A second key decision concerned the definition of apprenticeship. If a firm

told me on the telephone that they 'did apprenticeships' and my enquiries revealed that the training period for their 'apprentices' was two years, they did not go on first year off-the-job training or on day release or evening classes, yet at the end of their training they were to be put on the skilled rate, then should they be included? The criteria for counting firms as having 'apprentices' were simple: training must be at least four years in length and they were called 'apprentices' by the firm. Making the criteria more stringent than this would have undercut the old apprenticeship (as described in Chapter Three). Hence, firms whose apprentices did not go on day release/block release or to evening classes and whose training was totally on-the-job would be included. Firms who did not indenture apprentices or have any signed apprentice agreement would also be included. The final definition was very liberal, but it was adequate to the task as it did not overdetermine in advance what was to count as apprenticeship. The procedure adopted seemed reasonable as opposed to operationalising some of the definitions of apprenticeship in the literature which tended to be too vague.^[14]

A similar solution was adopted on the issue whether a firm's apprentices were technician or craft apprentices. The issue was complicated by the fact that some craft apprentices with good qualifications followed TEC courses at technical college even though they were destined for craft areas after their apprenticeship. Stubbs (1980,p.10) reports that 40% of technicians started as craft apprentices, which blurs the distinction still further. A number of writers and government publications have pointed to the difficulty in defining the role of the technician (Woolhouse and Haxby:1966; MSC:1981a; National Advisory Council on Education for Industry and Commerce:1969). The problem of defining 'technician' in terms of what people called technicians actually do is susceptible to vagueness, as the range of job functions performed by technicians, even within one industry, is very wide. For example, the Department of Education and Science (DES) (1969) takes this tack and produces an extremely general definition which could easily include a number of management roles. A common approach is to define the technician as occupying a particular status and role between the craftsman and the

technologist (DES:1965; Dobson:1966; MSC:1976). Objections to this approach have been lodged by the National Advisory Council on Education for Industry and Commerce (1969) on the grounds that it is too 'technical', and does not relate to those such as business technicians who have little contact with craftsmen or technologists (p.3). Gorz (1976a) defined the technician's role in terms of the subordination of living labour to dead labour (machinery), and to capital. This was secured through the monopoly of skills and the degradation of workers and represented the separation between mental and manual labour (p.175). But such a sociological definition did not resolve the question of whether what firm X called 'technician apprenticeships' were really technician apprenticeships; it was not possible to ascertain whether those defined as technicians by Gorz were doing the sorts of things technicians did according to his definition. To cut through these problems it was decided to adopt a naturalistic solution; to take those defined as technicians by their firms as technicians, and then point to the differences in training, further education, qualifications and so on amongst those defined in this way.[15]

Another important decision made before starting the CEES was that only firms who had recruited at least one apprentice in the five years prior to interview would be included. This was to ensure that employers did not have to rely too much on memory as to how they recruited apprentices. This is referred to as the five year rule throughout the thesis.

Sample Construction and Procedure

Altogether, 450 engineering firms were contacted - forming the population from which the eventual CEES sample emerged. Out of these 450 firms, 107 firms came to comprise the CEES sample. There were no comprehensive lists on apprenticeships in the Coventry area. Four sources were used.

First, a CCS booklet, (CCS:1979a), which listed 194 enterprises in Coventry and Warwickshire which had engineering apprenticeships. Within this list there were 138 firms with apprentices operating within my geographical area of study. All these firms were approached, and 76 were visited. However,

three of these 76 firms were ineligible for inclusion in the CEES as it transpired that they just broke the five year rule - leaving 73 firms in total. As 107 firms comprised the CEES, therefore 68% of the sample came from this source. Of the 62 firms not visited not all were straightforward refusals. There were 46 which refused access. Nine firms had gone out of business; the letter of introduction was returned explaining this fact (in two cases it was explained by the firms' receivers) or it was explained to me over the telephone by the new people who had moved in, or (in one case) I read about the collapse of the firm in the local newspaper. Another five firms were ineligible owing to the five year rule. One firm had moved from Coventry to Nuneaton, and finally one firm said that I could come for interview but unfortunately the owner died before I could interview him.

The second most useful source for sample construction was the Lord Mayor's Secretariat Apprenticeship Registrations for Indentured Apprentices applying for entry to Freedomship of the City of Coventry. This was a series of ledgers giving the registrations of each apprentice, the name of the firm and the date of registration.^[16] A further 33 firms were approached for interviews from this source. Interviews were held at 15 of these firms as part of the CEES.

The third source of the sample was the local telephone directory and 'Yellow Pages'. This was an expensive and time-consuming exercise; altogether 278 firms were approached. These firms had to be asked whether they had apprentices before the issue of interviews was broached. This expensive process yielded a paltry 18 CEES firms. For these firms there was no letter of introduction, as funds and time were tight. They were approached directly by telephone. Few of them had apprenticeships. Finally, one firm came from the MGTS Careers Bulletin (1980).

The procedure for contacting firms (at least the firms in the Careers Service booklet and from the Lord Mayor's Secretariat) was basically the same as that for the Pilot Study with a few important differences. The same letter of introduction was sent out, but there was swifter use of the telephone follow-up to speed the research along. All interviews were

arranged with people involved in apprentice recruitment. The introductory talk prior to interview, described in the previous section, remained basically the same. The interviewees were given the option of turning off the tape at any point as in the Pilot Study.

The importance of an introductory discussion before commencing the interview should be stressed at this point. A substantial minority were concerned about the use of a tape-recorder. Altogether, 16 firms out of the 107 firms interviewed declined to use the tape-recorder. Most refusers were small firms with up to 50 employees; 11 who refused to tape were in this group. Three were in the 51-100 size group and two were in the 101-500 group. All the large firms, those with 501-1000 and those with 1001+ employees, used the tape-recorder. Where firms refused to tape, the replies were written down in the interview.

Amongst a significant minority of the small and medium sized firms there was a certain suspicion about my motives. For some of them it was the first time that they had been interviewed by a social researcher. A few were anti-sociology, even anti-academic. Some of the MGTS firms wanted reassurance that I was not working for MGTS and 'checking up on them'. One firm thought I was a salesman posing as a researcher. Another grilled me about being a possible Inland Revenue spy. These firms needed extra reassurance before the interview could commence; I always took my Warwick University student card and library ticket with me as well as a variety of official letters. On the other hand, another firm wanted me to be a salesman for them; advertising and selling their products as I went round the various firms!

After the interview, and after playing the tape through a few times, I would occasionally need to phone the interviewee to clear up specific points. In some firms the background noise was very intense and the answers were not always clear. Others did not always have some of the relevant figures to hand. The actual interviews lasted about two hours on average. Some of the large firms took up to 8 hours of interviewing, and at one of these firms four visits were required.

The CEES was started on Friday 14th November 1980, and finished in September

1981. Nearly three-quarters of all the 107 firms had been interviewed by the end of June 1981. By September only 12 'hard to get' firms remained to be interviewed. The tape transcription for the quantitative data was completed by December 1981. But it took a further four years to December 1985, to transcribe only about 50% of the most relevant qualitative data.

The CEES Sample

This sub-section sets out some of the basic information on the CEES sample firms.^[17] It also addresses some of the aspects involved in the distinction between old and new apprenticeships made in Chapter Three, Section (iv). Table 4.1 shows the firm size breakdown of the CEES sample. The forty-nine

Table 4.1: THE CEES SAMPLE - BY FIRM SIZE^[18]

SIZE GROUPS > Employee Nos. >	Group A up to 50	Group B 51-100	Group C 101-500	Group D 501-1000	Group E 1001+	All CEES Firms
No. in each Size Group	49	13	25	10	10	107
As % of All CEES firms (n=107)	46	12	23	9	9	99

smallest firms were predominantly engaged in small batch or single piece production in three main areas: firstly, jigs, fixtures, tools and guages; secondly, small batch production of components for the aircraft and motor industries; and patternmaking and sheet metalwork - there were ten small patternmaking firms. The predominance of sub-contracting in this size group partly explains the relative scarcity of commercial work; only 38% of these small firms did any marketing or selling.

In the next size group the type of production pursued was more evenly spread. There was some mass production, (three firms were involved in this). There was considerably more commercial work (85% of firms did this), and service work (54%). Less sub-contracting was involved and firms made and marketed their own products to a greater extent. Nevertheless, the vast

majority of these firms also did small batch (92%) and single piece work (92%) as well.

Firms in the 101-500 size group covered all the categories of production and commercial work. The other main difference between these firms and firms in the other two groups was that they carried out more maintenance work. The smaller firms were more likely to call in maintenance firms rather than employ their own maintenance crew.

The two largest size groups, 501-1,000 and 1001 plus, had all the production and commercial functions in abundance. All the firms in both size groups did their own maintenance work. The level of service work was considerably higher than in the other size groups; 70% of firms in both size groups did service work as against only 36% in the 101-500 group, 54% in the 51-100 group and 35% in the 50 and less group.^[19]

The firms in the CEES employed a total of 2,416 apprentices, including student, commercial/business technicians and laboratory technicians. Of these, 1,104 were engineering craft apprentices, 726 were technicians and 44 at one firm were unclassifiable as no distinction was made between craft and technician until the third year. The total number of craft and technician apprentice employed by CEES firms was 1,874. Almost all firms, (105) had craft training schemes, but only 52 had technician training schemes.

The craft training schemes provided by CEES firms were categorised according to CCS categories (CCS:1979a) plus an additional category for setters. Of the 105 CEES firms that had craft training schemes, the most common type of scheme was for the toolroom; 52% ran toolroom schemes. These schemes involved training for the production of specialised tools and parts, but it included machine tool manufacturers who had no separate toolroom but the work was usually one-off prototype or specialised work. Just over a half (51%), ran machine shop schemes. These schemes were for volume machining in one or more of the skills of turning, milling, grinding and shaping or drilling. A little over a third (37%) ran fitting and assembly schemes, including bench and machine tool fitting. Twenty-seven per cent ran electrical or electronics schemes. Just under a quarter (23%) ran sheet

metal and fabrication schemes, including panel beating and welding. Thirteen per cent ran patternmaking schemes, which included wood, plastic, clay and metal patternmaking. Only twelve per cent of those with craft training schemes had maintenance schemes, and seven per cent ran schemes for setters (conventional machine and automatic and computerised machine setters). Finally, four firms (4%) each ran inspection schemes and experimental automotive fitting/body building schemes, and single firms ran schemes in instrument mechanics, model making, pipe fitting, diamond toolmaking and cable jointing.

Technician training schemes were far less well-defined than craft. The traditional way to train technicians is to have them 'do the rounds' of the various departments technicians work in to give them a broad based training, see what type of work the apprentice is most suited to and, if this coincides with openings, place them in the appropriate department. Technicians whose work would ultimately include an element of work on the shopfloor and close working with craftsmen had shopfloor experience built into their general training. The way in which technician apprentices progressed in technical education also had a bearing on the department they finally entered.^[20] Some firms recruited technicians for specific areas, typically the drawing office, metallurgy and electrical or electronics. Of the fifty-two firms that ran technician schemes, thirty-eight (73%) had general technician courses not related to any specific area of work. Thirty-five (67%) ran drawing office schemes, six (12%) ran schemes for metallurgists and nine (17%) schemes for electrical work or electronics. A variety of other schemes were run less frequently; two firms ran metal laboratory technician schemes, and single firms ran the following schemes: X-ray department, polymer technician, toolroom/drawing office, toolroom, die and moulding technicians, foundry technicians, work study technicians, sheet metalworking technicians and engineering computing technicians.

Most CEES firms had some sort of written indentures or agreements for apprenticeships. Ninety-six firms (90%) had compulsory indentures for apprenticeships. Another three firms had optional indentures, where the apprentice could be indentured if either the apprentice or the

parents/guardian so wished. Four firms had 'agreements' rather than indentures, although the real difference here was difficult to ascertain, not having seen examples. One of these four agreements was verbal only. Only four firms had no indentures/agreements at all and these were small firms employing a mere five apprentices between them.

Of the eleven firms that had either optional indentures/agreements or nothing at all, five were small pattern shops. But this group of firms also contained some surprising examples. S.D. Machine Tools (group D), Casablanca Cars (group E) with 149 apprentices and Conquest International (group E) and employing fifty-eight apprentices. These eleven firms employed 11% of all CEES apprentices.

Most firms (76 - 71%), had some sort of off-the-job training in the first year of the apprenticeship. Seventy-three of these firms had the full first year off-the-job training lasting forty-six weeks at an Engineering Industry Training Board (EITB) recognised training school or centre. The other three firms had off-the-job training in the premises of either other firms within their group (two firms), or at a company in an associated trade, (Viking Patterns' apprentices spent a few months in various foundries which used their patterns). The firms that did not have any off-the-job training were almost all small firms with 50 or less employees. Of these thirty-one firms, only one, (F. Cross & Sons), was not in the smallest size group. Indeed, the majority of firms in the 50 or less size group (30 firms - 61%), did not have any form of off-the-job training. All the firms in the 101-500, 501-1000 and 1001+ size groups had off-the-job training, and ninety-six per cent of the 51-100 size group had off-the-job training.

Of the seventy-six firms that had off-the-job training, forty-four (58%) used MGTS. Nineteen firms (25%) used one of the local technical colleges. Thirteen firms (17%) used either their own training school or a training centre/school of the group of companies they belonged to. Three firms used other venues for their off-the-job training. Three firms who did not have the full first year off-the-job, but whose apprentices did approximately two months off-the-job, sent their apprentices 'elsewhere' to the premises of

other firms in their group. These firms did not have a specialised training school/centre. One firm sent its metal laboratory technicians to its own research division. Four firms had split arrangements for off-the-job training. Carbitool sent their metal laboratory technicians to MGTS for the first half of the first year programme and for the second half they went to the firm's research division. S.D. Machine Tools sent their craft apprentices to a training school of another firm in their group and their technicians to technical college. Minex sent their mechanical technicians to either MGTS or their own training school, (depending on numbers recruited) and their craft apprentices went to technical college.

All CEES firms except two did day release or block release further education courses as part of the apprenticeship. The two exceptions were Power Engineering, a non-Federated, non-MGTS firm with no off-the-job training, and Supertool & Gauge, a non-Federated MGTS firm with off-the-job training at MGTS. At Power Engineering, apprentices could do evening classes if they wanted to. Supertool & Gauge's apprentices had to do evening classes. On the day that they should have gone to technical college for day release in line with the rest of MGTS-trained apprentices they came in to work for a day at Supertool. Both of these firms were Group A by size and their apprentices were indentured.

These two firms were the nearest thing to the old apprenticeship. Yet as the above evidence shows, actual engineering apprenticeships in Coventry in the early 1980s were neither overwhelmingly old or new in toto. Firstly, although just over three-quarters of the CEES firms had off-the-job training, only in one case did this last longer than one year; Transco had two years off-the-job training for craft. Secondly, although the overwhelming majority of firms had indentures of agreements, almost all sent their apprentices to gain further education qualifications and all the apprentices at the large firms with training schools, those training with MGTS and those whose training with the colleges - the vast majority of apprentices - were involved in working their way through the EITB module training scheme which involved the apprentice performing stipulated skills to a required standard. Yet all this was taking place through time-serving,

the stipulated four-year apprenticeship. In reality elements of the old and new apprenticeship were intertwined.

Forty-seven of the 107 CEES sample firms used MGTS for recruitment. As the focus is on recruitment, when the term 'MGTS firm' arises in the thesis it refers to the fact that a firm used MGTS for recruitment. This applies even where the firm uses MGTS for recruitment but not for off-the-job training. Sixty firms in the CEES sample were non-MGTS firms.

This brief account of some of the salient features of the CEES sample firms provides a backdrop against which the data in Part Two can be more readily appreciated. Further, more detailed basic information on the CEES sample can be found in Appendix 4, Section (A). Before going on to describe the two studies carried out with apprentices a few notes on the presentation of the CEES data are necessary.

Notes on Presentation of the CEES data

The firms have pseudonyms in the thesis. However, anyone familiar with the Coventry labour market should be able to spot particular firms, especially the larger ones. It was decided to refer to Coventry in the thesis, as opposed to 'a town in the midlands' or the ubiquitous Newtown, as then a whole wealth of material could be used which otherwise would have to have been left out, and which added much to the thesis. In particular, material from the 'Coventry Evening Telegraph' (CET), Coventry Education Committee and the CDEEA, proved extremely useful. The material on the Coventry labour market is not just background material but figures in key arguments of the thesis. Of course, the 'Coventry Evening Telegraph' could have been changed to 'Newtown News' and suitably banal names could have been found for all other publications and sources connected with the City. But the next chapter on the labour market, showing the heavy concentration of manufacturing, the extent of the engineering industry, the unemployment statistics and the general description of the City leaves little doubt that the City in view is Coventry. The whole exercise of hiding Coventry would have been pointless. The pseudonyms provide a veil of confidentiality, and throughout, none of

the employers are referred to by name.

On the qualitative data, the policy has been to attempt to faithfully reproduce the pauses, laughter and other important contextual aspects. On occasion, notes have been added to clarify these contextual aspects. Pauses were sometimes highly significant, suggesting that either the employer was at a loss as to how to respond to a particular question or was reluctant to answer it. Three dots indicate where the material has been edited. This is the convention used on secondary sources also.

None of the material from the Pilot Study has been included in the quantitative data presented in the thesis. Qualitative material from the Pilot Study has been included, typically where the CEES employers make the same point but less succinctly.

Where the data was disaggregated, size of firm was taken as the key independent variable. This was because firm size was related to so many other factors; the likelihood of using MGTS for recruitment, whether firms had professional personnel/training staff, whether they had off-the-job training, whether they had technicians - were a few of the important ones. The firm size categories used were: up to 50 employees (group A); 51-100 (group B); 101-500 (group C); 501-1000 (group D) and 1001+ (group E).

(v) The Apprentices' Study: Shopfloor Interviews

Through contacts with MGTS it became possible to interview over a hundred first year apprentices at their Parkside Training Centre. The idea was to examine the recruitment process from the apprentices' perspective. It was not possible to interview them all separately as they were going through a highly-structured system of training, lectures and demonstrations and could not afford to lose any time, especially in the first three months, according to the apprentice supervisors at the Centre. Therefore, a system of shopfloor interviewing was devised which was acceptable to the supervisors.

The shopfloor interviews involved a fairly short series of questions which were put to the apprentices whilst they were still working. On most

interviews there were interesting digressions off the set questions. The replies were written down. Tape-recording was impossible because of the intense noise. This had one advantage; because of the noise apprentices felt free to talk knowing that supervisors could not hear them. The disadvantage was that sometimes the apprentices could not be heard either. The solution, (worked out after about 10 interviews) was to interview the apprentices on the sections where it was quieter, such as milling.

In all, 107 apprentices were interviewed. Four other apprentices left their courses before they were interviewed. These 107 apprentices included eight from a large firm, Minex Communications, who were there due to a shortage of training capacity in their firm and eight EITB first year apprentices who were not with any particular firm but were sponsored by the EITB. The other 91 were from MGTS member firms. Thus, the sample was not representative of engineering firms in Coventry, being towards small-to-medium firms as compared with the CEES sample. This limitation of the sample was outweighed by other advantages, as we shall discover below.

My interest was in first year apprentices as I wanted to talk to them about their recruitment experiences. Taking second, third or fourth years would have left too much to increasingly distant memories. Once it had been decided to research first year apprentices, however, I knew there would be problems. To get a comprehensive sample it would have been necessary to interview apprentices in training schools in the large firms, at the technical colleges for small to medium firms, at individual firms for those who did not have first year off-the-job training, and at the MGTS training centre for MGTS firms. Given the large commitment to the CEES this would have been impossible. Another, better, alternative would be to interview them on day release at their technical colleges. But the withdrawal of apprentices from their classes at an early stage in the academic year would have been necessary, (so that their memories of being taken on by their firms was not too dim), and they or their lecturers might not be too keen on this. The approval of Principals, Heads of Department, individual lecturers

and apprentices themselves at at least two colleges would have been required. In the event it was decided to settle for something less than ideal; the MGTS option. The fieldwork programme was already congested, therefore I went for what was feasible rather than what was best.

The study was started in the last week of August 1980, and completed by the end of March 1981. It had to be fitted in around interviews for the CEES otherwise it could probably have been done in about four weeks. The fact that apprentices disappeared for one day a week to technical college, and the fact that dinner breaks were staggered due to the size of the canteen and that I was reluctant to interview apprentices on the noisier sections also slowed the interviewing down.

(vi) Apprentices' Records

The big advantage of interviewing MGTS first year apprentices as opposed to other groups of first year engineering apprentices in Coventry was that I had access to their personal files. Such access would have proved difficult in terms of apprentices from training schools and perhaps first years at technical colleges in my view. The MGTS apprentice records posed no problems of access. The MGTS supervisors gave me instant permission to use them. They were situated in a tiny office at the back of the MGTS Training Centre next to the sheetmetal section.

These records were used extensively. Their especial value lay in the fact that I could compare statements made by MGTS firms in the CEES with what actually happened. For example, I could compare what MGTS employers said about the qualifications for craft and technician apprentices with the actual qualifications which actual apprentices had been recruited with. The records that I found to be particularly useful were: the original application form, the MGTS progress reports, the school reports and the interview records and test scores. From these, data was collected on: qualifications, date of birth, further education course for day release, whether applicants preferred craft or technician apprenticeships, if they had any preferences regarding firm, written reasons as to why they wanted to

go into engineering, their hobbies and interests, their positions of responsibility held at school, test scores, their performance at MGTS (including lateness, absenteeism and progress marks), and occupation of parents. As access to this material had been gained before starting the shopfloor interviews, it was not necessary to ask certain questions in these interviews.

Data from the apprentice records was extracted during January-March 1981. As the records of various apprentices went missing for weeks on end as they were sent to their employers for perusal, it was not always possible to get a complete set of figures for all apprentices. Much back-tracking was involved when the individual records were returned to MGTS. Some of the sections were omitted for the Minex Communications apprentices, and there were no test scores for these apprentices as they were not recruited under the MGTS umbrella. Given these facts the total numbers included within different series of data varied.

(vii) Autobiographical Note

In this chapter the various methods of research and the fieldwork studies pursued have been described. The fieldwork studies were designed with reference to the initial concerns of the thesis outlined in the previous chapter. The following chapter describes the context in which the research took place; the Coventry youth labour market and the economic situation in the City as a whole. This is not just interesting background. It is argued in Chapters Eight, Twelve and Twenty-three that the structure of the Coventry youth labour market is important in explaining the crisis of interest in engineering amongst Coventry school leavers.

Chapter Five would not have been written had I not spent three years, from October 1982 to September 1985, as Research Officer (MSC Programmes) in the Coventry Education Department. I was based at TOPSHOP, the Coventry Training Workshops, and this gave me first hand access to the workings of the Youth Opportunities Programme (YOP) and put me in an excellent position to observe the formation of training schemes under the YTS. I was closely involved in

the change over from the YOP to the YTS.

One feature of this work which had particular bearing on the thesis was the planning for the YTS. Along with staff from the Careers Service, the local office of the MSC and Education department staff, I was involved in an elaborate exercise in trying to ensure that the structure of the YTS provision in Coventry related closely to the structure of the local youth labour market. This work involved research into the Coventry youth labour market. Indeed, this is just one illustration of the third aspect of the post; it enabled me to collect a vast amount of material, (reports, internal documents, minutes of meetings...etc.), a fraction of which is used in Chapter Five. In my official capacity I had access to documents not ordinarily available to external researchers.

Chapter FiveTHE LABOUR MARKET FOR YOUTH IN COVENTRY - (WITH SPECIAL REFERENCE TO ENGINEERING APPRENTICESHIPS)(i) Introduction

In this chapter crucial aspects of the social environment in which the CEES proceeded are described. The Coventry youth labour market, particularly the apprenticeship market, is outlined. Particular attention is given to the structure of the Coventry youth labour market, and the ways that it developed from the mid-1970s to the early 1980s.

Evidence presented in this chapter also figures in arguments in Chapters Eight and Twelve concerning the crisis of interest in engineering amongst Coventry school leavers. Chapter Eight reveals that there was a problem of apprentices having a low level of commitment to working in engineering. Results from the Apprentices' Study in Chapter Twelve show that there was a substantial minority of apprentices who were not very interested in working in engineering. This minority saw their work as either being a second choice career, as being better than no job at all or had been 'pushed into it' (typically by parents) or had entered their apprenticeships for other dubious reasons - but certainly not on an interest in the type of work.

Explanations of the crisis of interest in engineering are examined in Chapter Twelve. It is argued there that the employers' complaints about lack of interest in engineering amongst Coventry youth were substantially a result of the dominance of engineering in the Coventry youth labour market. This chapter demonstrates this dominance, especially in relation to apprenticeships; it is part of the general argument of the thesis and a key introductory chapter. As developments in the youth labour market were affected by more general trends in the Coventry labour market as a whole, some outline of the latter is necessary. The next section describes developments in the Coventry labour market as a whole.

(ii) Coventry: Labour Market Trends

Coventry is a manufacturing town. The manufacturing sector of the Coventry local economy is dominated by industries which arose from technical developments of the late nineteenth century: motor vehicles, aerospace, telecommunications and artificial fibres.^[1] Of these, motor vehicles is of central importance in the local economy.

During the second half of the nineteenth century, sewing machine and bicycle manufacture developed out of the old established textile and metal trades.^[2] The cycle trade was of particular importance as it provided a foundation of skilled mechanics from which the motor car industry developed in the early twentieth century. By 1914 there were more than 50 car manufacturers in Coventry (CBI Special Programmes Unit:1983). Trades which complimented and supported the local motor industry also flourished from the turn of the century: patternmaking, machine tools, jig and gauge making, instruments and electrical equipment. By 1966, manufacturing industry in Coventry provided 63% of the City's jobs, and the motor vehicle sector alone provided 28% (ibid.).^[3]

According to Friedmann (1977b), Coventry was '...a showpiece of British capitalism'(p.247) from the late 1880s until the late 1960s. In the 1950s and 1960s Coventry was characterised as a 'boom town'. This was a period of rapid expansion in local manufacturing industry, and post-War reconstruction of the City-centre provided an upsurge in demand for construction workers. The number of employees in the City increased by 30% 1952-1966, wages were higher than the national average, and unemployment stood at only 1% in 1966 (Rosser and Mallier:1981,p.11). In these circumstances Coventry experienced substantial population gain caused primarily by working age males coming to the City from other parts of the country and from Ireland.

However, as Rosser and Mallier (1981) have noted, 'the economic base of Coventry in the post-War era has been an extremely narrow one'(p.11), with manufacturing industry providing some 65-72% of all employment between 1952-1971, and motor vehicles alone providing 35-40% of all jobs in the Coventry Employment Exchange Area in the same period (ibid.). This narrow economic

base proved extremely vulnerable from the late 1960s, especially during the recessions of 1967-8 and 1975-6, and particularly during the prolonged recession of 1979-82 that was in full swing as the CEES data was being gathered. By the early 1980s, Coventry men aged over twenty-one earned the second lowest average wages in the country (Lawrence:1983). The story of Coventry going from boom town to 'ghost town' (Landa and Simmons:1981) has been related many times.^[4] At best, in the 1979-82 recession, Coventry was described as being 'in decline' (Bucknall:1980), and at worst 'in crisis' (Crisis Group:1980,1981).

The CBI Special Programmes Unit (1983) summarised the basic economic problem faced by Coventry very succinctly: Coventry is a manufacturing town, British manufacturing in general was very weak on international comparisons from the late 1960s, so therefore, especially in times of recession, Coventry's employment was hit hard. Given the heavy reliance on manufacturing in Coventry and the parlous state of British manufacturing then:

'Coventry's misfortune is that it seems to be hit earlier and harder than many other areas, and not to recover fully.' (Rosser and Mallier:1981,p.11).

The CBI Special Programmes Unit (1983) also noted the fact that motor vehicles took up such a large proportion of manufacturing employment in Coventry, exacerbating the problem of heavy reliance on manufacturing jobs. The British motor industry underwent a series of crises, restructurings and rationalisations from the late 1960s resulting in major redundancies.

Yet Coventry remains a manufacturing town on national comparisons. Certainly manufacturing employment has become less dominant,^[5] with services taking up an increasing proportion of employment from 1972-1983. Yet manufacturing still took up 47% of employment in Coventry in 1981 whilst manufacturing took up only 28% of employment in Great Britain as a whole (CBI Special Programmes Unit:1983, para 5.6). Thus, a relatively high concentration of manufacturing employment remained, despite the loss of 52,983 manufacturing jobs in Coventry over the 1971-81 period, (43,177 jobs being lost in motor vehicles alone) (Economic Unit:1984). The proportion in service employment rose over the same period, but only a modest increase in actual numbers

employed in the service sector was recorded, (a rise from 62,324 in 1971 to 71,523 in 1981) (ibid.p.50). The huge loss of manufacturing jobs 1971-81 was not compensated by this modest rise in service employment. Coventry's overall employed labour force shrank from 192,435 in 1971 to 146,332 in 1981: the result;) mass unemployment. 'Unemployment', 'Crisis' and 'Redundancy' became familiar words in the pages of the 'Coventry Evening Telegraph' during the 1979-82 recession.

The next section examines unemployment trends in Coventry from the mid-1970s to the early 1980s. Together with this section, it provides a backdrop against which which engineering employers were making decisions about whether to take on young people for apprenticeships.

(iii) Unemployment in Coventry

This section outlines unemployment trends in Coventry over the 1976-1983 period. An MSC/Coventry Education Department report (1977a,b,c) illustrated how the unemployment rate in the Coventry travel-to-work-area (TTWA) was consistently above the West Midlands Region and Great Britain rates from 1974-1975.^[6] In January 1977 Coventry had the fourth highest rate of any TTWA in the West Midlands Region, and by January 1979 the second highest, below Oakengates.^[7] By January 1982, the Coventry TTWA had the sixth highest unemployment rate in the West Midlands Region, and the eighth highest in January 1983.^[8] Coventry's misery was becoming increasingly generalised throughout the West Midlands Region. Furthermore, of the TTWAs overlapping with the West Midlands Metropolitan County, Coventry had the highest rate of unemployment in June 1977, but the lowest in June 1983.^[9] In 1976-77, the unemployment situation in the Coventry TTWA was relatively bleak, but from 1980-81 onwards an increasing number of TTWAs in the West Midlands Region experienced even higher rates of unemployment than Coventry.

Although unemployment in Coventry was high over the 1976-1983 period, reaching just over 17% in the Coventry TTWA in 1982, with rates as high as 23% (Foleshill) and 22% (St. Michaels) in some Coventry wards (Economic Unit:1983,p.44), yet by 1982 Coventry was no longer a 'special case'

regarding unemployment in the West Midlands. Young people and adults looking for work in Coventry would gain little by seeking work in other parts of the West Midlands. Other areas in the West Midlands could claim an equal and sometimes greater devastation of their employment prospects.

On unemployment amongst young people, and especially amongst school leavers, Coventry was in a particularly dire situation in the late 1970s compared to other parts of the West Midlands and Great Britain. The MSC/Coventry Education Department (1977c) noted that:

'The recent MSC report, 'Young People and Work', shows that the employment situation of youngsters in Coventry is one of the most serious anywhere in the country. Within the West Midlands the situation in Coventry is unparalleled.' (p.23)^[10]

The next section examines this claim.

(iv) Unemployment Amongst the Under-25s in Coventry: 1976-1983^[11]

From January 1976 to July 1983 the number of under-25s who were unemployed in the Coventry Jobcentre Area was always higher than the numbers of 25-44 and 45+ year olds who were unemployed, (except for April 1981, when the number of unemployed 25-44 year olds was 235 higher than the under-25 total). Therefore, Coventry's unemployment crisis of this period was particularly a crisis of unemployed young people. This was despite the fact that substantial numbers of young people in the 16-18 age group were on the YOP after 1978 and hence not included in the unemployment statistics for the under-25s. Since the 1980-81 peak in the 1979-82 recession, when large numbers of older workers were made redundant, the gap between the three age groups narrowed, although the under-25s consistently accounted for between 35 and 43% of the City's unemployed over the period.^[12]

Long-term unemployment amongst the under-25s stood at 375 in January 1976.^[13] The number of long-term unemployed under-25s rose steadily to reach 1,147 by July 1977, but from January 1978 until July 1980 the total remained fairly static overall, fluctuating within the 750-1,065 range. However, from January 1981 to July 1982 the delayed effect of the recession

took its toll and the total soared from 1,141 to 3,371 - a rise of 197%. The total fell slightly in January 1983 to 3,204 but rose to a new record in July 1983 of 3,650.

The percentage of the City's unemployed under-25s who were long-term unemployed was considerably higher than the level of long-term unemployment amongst the unemployed under-25s in both Great Britain and the West Midlands. Of those under-25s who were unemployed in Great Britain in January 1980, 10% were long-term unemployed, but in the West midlands Region and the Coventry Jobcentre area the corresponding figures were 11% and 18%. The proportion of the Coventry Jobcentre Area's long-term unemployed who were under-25 rose from 21% in January to 26-27% in the Januarys of 1981-83.

DoE statistics for age and duration hide the impact of Government training schemes for the young unemployed. To gauge the impact of the YOP/YTS on the Coventry youth labour market we have to turn to CCS statistics. The following section examines unemployment amongst 16-18 year olds in Coventry and the rise of Government sponsored training schemes for the young unemployed in the City using CCS statistics.

(v) Youth Unemployment and the YOP/YTS in Coventry

The impact of the YOP/YTS is most readily seen when the numbers of 'Fully Unemployed Young People' are examined. This CCS term refers to those young people who are seeking permanent employment, are not on a Government Sponsored Special Programme, (such as YOP/YTS), and are registered for work at either the Careers Centre, Pastoral Bases [14], or the Jobcentre. Registration for work is the key element; the data does not refer merely to claimants of supplementary benefit or unemployment benefit, (even after October 1982 when the figures produced by the DoE switched from registrations for work to those claiming benefit). However, those young people who were 'starting jobs/full-time courses in the near future' have been excluded as they were clearly not seeking permanent employment at the time of registration.

Three main points can be derived from Figure 5.1, which shows the number of young people who were fully unemployed 1977-1983. First, the trend was rising 1977-78, and probably would have continued to rise had it not been for the impact of the YOP. Secondly, the YOP had an immediate impact in 1978-79. The number of young who were fully unemployed in 1977-78 was clearly lower than the number in 1978-79 if the peaks and troughs are compared. Thirdly, after this immediate impact of the YOP in 1978-79, (coming on top of a slight improvement in the local economy 1977-79), the upward trend continued in 1979-80 up to 1983. The increase in the number of young people who were fully unemployed was particularly marked in 1980-81 as the CEES fieldwork was being conducted.

The interesting point is why, despite the immediate impact of the YOP, there was an upward trend in the numbers of those fully unemployed after 1980. Research that I carried out for Coventry Education Department's Programme Development Group suggested that this took place for two reasons: the YOP did not expand quickly enough in 1980-81 to cope with the recession,^[15] and that an increasing proportion of those who were fully unemployed after 1979 were ex-YOP trainees who remained unemployed after their YOP. Underlying these points was the fact that the local economy deteriorated sharply from 1979-1982. Let us now turn to a direct examination of the numbers of young people on Government Sponsored Programmes (GSP) for the young unemployed.

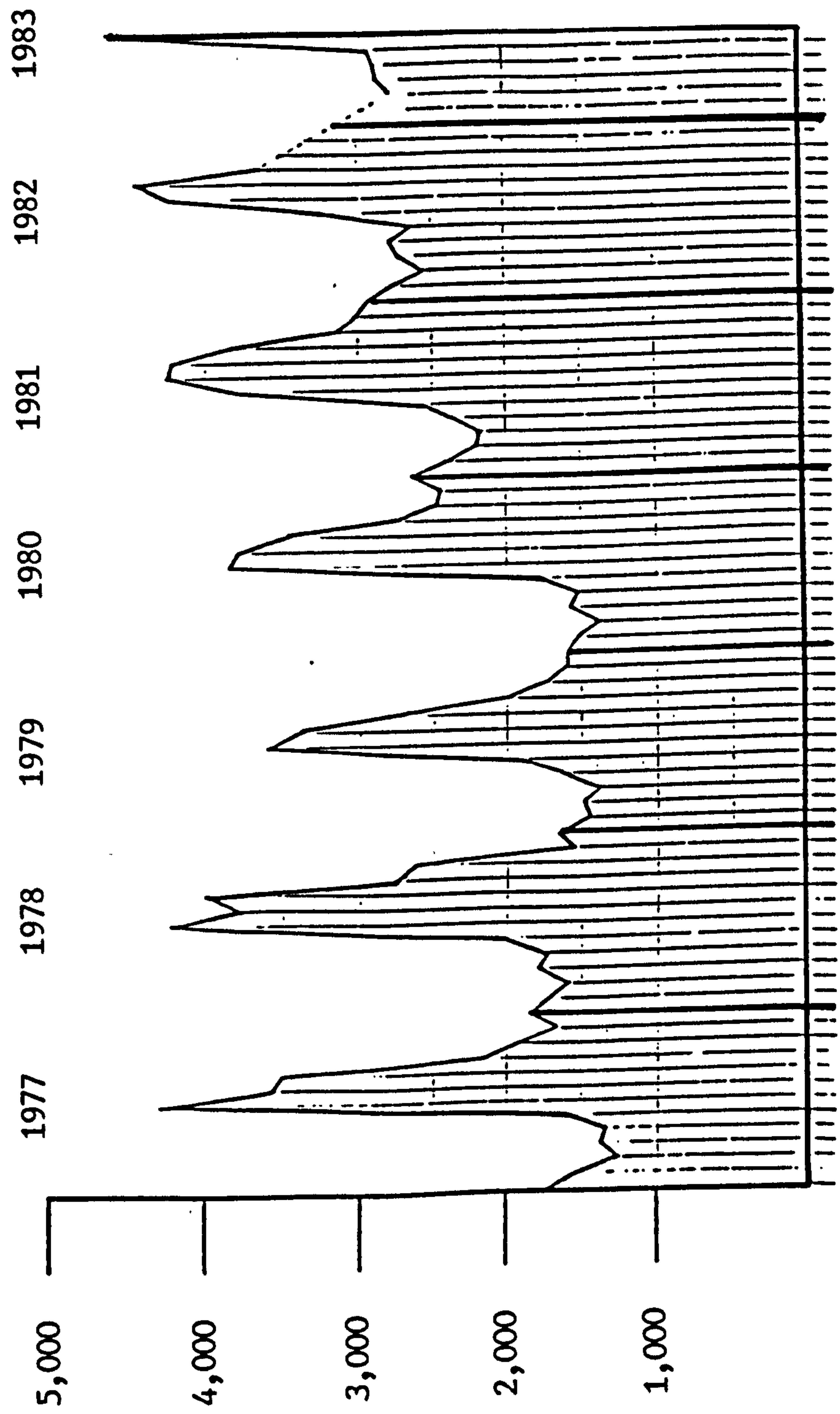
Those on GSP for the young unemployed includes those on the YTS as well as the YOP. Also included are the pre-YOP courses, such as the City's Scheme for Training and Recruitment which received MSC backing, the early Job Creation Programme and Community Industry and the training Award Scheme (for first year apprentices run by the training boards) - all of which received a degree of Government financial support. All these schemes were known locally as being parts of the Coventry Youth Programme (CYP). In effect, we are now looking at the numbers of young people who were on the CYP.

In 1977 the average number of young people on the CYP was 627.^[16] By 1982 it was 2,790 - just over a fourfold increase. There was a steady growth in the numbers of young people on the CYP 1977-79. This increase slowed 1979-

Figure 5.1 : NUMBER OF FULLY UNEMPLOYED YOUNG PEOPLE IN COVENTRY - 1977/1983

Data for November and December 1982, and January and February 1983 not available. Excludes those young people who are starting jobs/full-time courses in the near future.

Source: Coventry Careers Service Monthly Returns, 'Unemployed Young People'.



80, only to be followed by a dramatic increase in 1980-81, and then a further slowing down during 1981-82. Table 5.2 shows the numbers of young people on the CYP for the quarterly months January, April, July and October 1983. Apart from the April 1979-80 drop the picture was one of almost continuous growth when the year-on-year figures are compared. The other anomaly in the data series of Table 5.2 was the relatively low number of young people on the CYP in July 1983. There were 550 less young people on the CYP in July 1983 than in April 1983, and 273 less than in July 1982. Two interrelated factors accounted for this situation. First, a number of young people delayed entry onto the CYP so that they could enter the new YTS in September 1983; (in 1982, Coventry ran Pilot YTS courses). Secondly, the old YOP was gradually being phased out from January 1983. Even as late as October 1983, some Mode A YTS courses had still not started in Coventry, which depressed the total number of young people on the CYP as they waited for their courses to start up (Richards:1984).

Table 5.2 : NUMBER OF YOUNG PEOPLE ON GOVERNMENT SPONSORED PROGRAMMES/COVENTRY YOUTH PROGRAMME, (FOR QUARTERLY MONTHS: JANUARY, APRIL, JULY AND OCTOBER), 1977-1983.

YEAR>	1977	1978	1979	1980	1981	1982	1983
QUARTERLY MONTH							
January	418	700	1,533	1,560	2,151	2,823	3,194
April	837	964	1,403	1,277	2,275	2,554	2,752
July	308	787	1,093	1,326	2,341	3,475	2,202
October	1,098	1,327	1,813	2,212	2,693	3,204	2,772

Source: Coventry Careers Service, Monthly Returns, Unemployed Young People

Adding together those young people who were fully unemployed and those who were on the CYP we arrive at those who were Seeking Permanent Employment (SPE), in Coventry Careers Service terminology. Those who were SPE does not include young people who registered for work and who started work or full-time courses after the summer holidays, (typically students and apprentices and other young people who signed on for the summer months only before

taking to study or their first jobs). These young people were not seeking permanent employment in the summer months.

Data from the CCS Monthly Returns shows that the numbers SPE rose 1977-78, then appears to have fallen slightly 1978-79 in line with the improvement in the local economy. There after, the number SPE rose to 1983. Numbers peaked at 4,612 in July 1977; 5,047 in July 1978; 4,707 in July 1979; 5,420 in August 1980; 6,791 in September 1981; 7,132 in September 1982 and 7,506 in September 1983 - a record figure.

Summary

So far we have seen how Coventry's manufacturing base was eroded in the 1970s and early 1980s yet the City still had a larger than average proportion of its workforce in manufacturing as the service sector failed to fill the gap. Because the service sector expanded less in Coventry than in Great Britain as a whole, and given the devastation of the motor vehicle sector within Coventry's manufacturing base we also saw the inevitable result: mass unemployment. Young people were particularly affected by unemployment in Coventry.^[17] From 1976, increasing numbers were going onto Government Sponsored Programmes for the young unemployed. But how were these developments affecting the destination of fifth form school pupils in the City? After all, it was the fifth form pupils that provided the vast majority of entrants to engineering apprenticeships; few young people over 16 were taken on as apprentices in engineering. The next section examines this question in detail.

(vi) The Destination of Fifth Form Pupils in Coventry

The data in Tables 5.3/5 shows the destination of fifth form pupils in Coventry at the end of the calender year in which they could leave school. Table 5.3 shows the extent to which the 1979-82 recession devastated the youth labour market in Coventry. In 1979, 2,535 fifth formers left school and were in work. But in 1980 this figure was nearly halved and the downward

Table 5.3 : THE DESTINATION OF FIFTH FORM PUPILS IN COVENTRY, 1975-1984

DESTINATION YEAR	RETURNED TO SCHOOL	F.E. COLLEGE COURSE	GOVT. SPONSORED YOUTH PROGRAMMES YOP/YTS.... etc.	FULLY UNEMPLOYED	IN WORK	OTHER [18] - left district, unknown, not avail- able	TOTAL No. of 5th Form pupils in Year Group
1984	1,414	529	1,832	373	637	219	5,004
1983	1,322	657	1,947	309	712	197	5,144
1982	1,334	628	1,769	423	719	210	5,083
1981	1,268	801	1,553	571	948	194	5,335
1980	1,256	601	1,202	656	1,475	273	5,463
1979	1,338	677	724	422	2,535	306	6,002
1978	1,300	743	730	506	2,106	353	5,738
1977	1,263	671	780	271	2,500	236	5,721
1976	1,205	552	438	826	2,354	282	5,657
1975	1,169	455	335	409	2,411	540	5,319

Source: Coventry Careers Service - Annual Reports, Pastoral Base Statistics.

Notes: The figures for each year refer to the situation in December after leaving school, except for 1981 which refers to Jan. 1982. Figures pre-1980 included special school pupils; these were not included thereafter.

Table 5.4 : THE DESTINATION OF FIFTH FORM PUPILS IN COVENTRY, 1975-84 : PERCENTAGE GOING TO EACH DESTINATION

DESTINATION YEAR	RETURNED TO SCHOOL	F.E. COLLEGE COURSE	GOVT. SPONSORED PROGRAMMES YOP/YTS...etc.	FULLY UNEMPLOYED	IN WORK	OTHER - left district, unknown, not available	TOTAL (Rounded up to nearest 1%)
1984	28	11	37	7	13	4	100
1983	26	13	38	6	14	4	101
1982	26	12	35	8	14	4	99
1981	23	15	29	11	18	4	100
1980	23	11	22	12	27	5	100
<hr/>							
1979	22	11	12	7	42	5	99
1978	23	13	13	9	37	6	101
1977	22	12	14	5	44	4	101
1976	21	10	8	15	42	5	101
1975	22	9	6	8	45	10	100

Source: Coventry Careers Service - Annual Reports, Pastoral Base Statistics.
Notes: [as Table 5.3].

Table 5.5 : FIFTH FORM LEAVERS ENTERING THE LABOUR MARKET IN COVENTRY, 1975-1984

YEAR	NUMBER OF FIFTH YEAR PUPILS	NUMBER ENTERING LABOUR MARKET	NUMBER ENTERING LM AS % OF ALL 5th Yr PUPILS	% OF THOSE ENTERING LM WHO WERE IN WORK	% OF THOSE ENTERING LM WHO WERE FULLY UNEMPLOYED	% OF THOSE ENTERING LM WHO WERE ON YOP/YIS...etc.
1984	5,004	2,842	57	22	13	64
1983	5,144	2,968	58	24	10	66
1982	5,083	2,911	57	25	15	61
1981	5,335	3,072	58	31	19	51
1980	5,463	3,333	61	44	20	36
<hr/>						
1979	6,002	3,681	61	69	11	20
1978	5,738	3,342	58	63	15	22
1977	5,721	3,551	62	70	8	22
1976	5,657	3,618	64	65	23	12
1975	5,319	3,155	59	76	13	11

Notes: (As Table 5.3). Number Entering Labour Market (LM) defined as those in work, those fully unemployed and those on Government Sponsored Programmes for the young unemployed.

trend continued to 1984 when only 637 were in work. Table 5.4 shows that the proportion of the year group in work went down twenty-nine percentage points 1979-84. By 1984 only 13% of the year group had jobs as against 45% in 1975. Yet the proportion fully unemployed remained fairly static. Partly this was due to an increase in the proportions of the year group returning to the sixth form and going onto further education college courses, but the main reason was the expansion of Government Programmes for the young unemployed. In 1975 only 6% were on the programmes. By 1983 nearly two-fifths of the year group were on YOP/YTS or some other programme.

The period 1979-81 shows the most traumatic change in the youth labour market in Coventry. During 1978, and much of 1979, there had been some improvement in the local economic situation. This was reflected in an upturn in the number and proportion of the fifth year group getting work in 1979. The rapidly worsening economic situation from late 1979 affected the youth labour market in Coventry at lightening speed. Job prospects for those fifth formers who decided to leave school plummeted in 1980 and suffered a further sharp deterioration in 1981. Thereafter, job prospects remained static at an abysmally low level.

Table 5.5 shows the full impact of these developments in the clearest terms. It examines the fate of those fifth formers who entered the labour market over the period. From three-quarters of those entering the labour market being in work in 1975 the situation deteriorated to just over a fifth in 1984. There was a massive increase in the proportion of those entering the labour market who were on Government Sponsored Programmes for the young unemployed. In 1975 just over 10% were on such programmes, but by 1983 two-thirds were. The proportion in schemes nearly doubled 1979-1980.

This section has demonstrated how the overall employment prospects for Coventry 16-18 year olds deteriorated over the 1975-1984 period. The sharpest deterioration came at the point when the CEES was being undertaken. But so far we have not examined the extent to which the structure of occupational choice was affected in relation to Coventry school leavers entering the world of work. A reading of Section (ii) might suggest

that those young people wanting a job or apprenticeship in manufacturing, and especially in engineering, would find opportunities for work in those areas becoming particularly constrained. On the other hand it was pointed out earlier that Coventry was still a manufacturing town, in absolute terms up to the early 1980s when, for the first time, service employment exceeded manufacturing employment in Coventry, but also in relative terms as a greater proportion of Coventry's workforce was in manufacturing than in Great Britain as a whole. However, because young people were disproportionately affected by the crisis in the manufacturing base in Coventry, in terms of being recruited, and were also subject to other developments which lowered the likelihood of their being recruited into manufacturing (see Note [17]), it might lead to the conjecture that Coventry was no longer a manufacturing town for its young people. Perhaps they were largely candidates for jobs in the expanding service sector. The following section looks at the evidence on this point through examining changes in the structure of the youth labour market in Coventry.

(vii) The Structure of the Coventry Youth Labour Market

In 1980 the CCS radically overhauled its methods of classifying and presenting data for its Annual Reports. One of the main changes was the way in which data on jobs entered by fifth year school leavers was organised. Up to 1980, the figures had been presented according to how many fifth year leavers had obtained employment in particular industries. The figures were organised by SIC's (Standard Industrial Classifications of the DoE). From 1980 the emphasis shifted to how many fifth year leavers had entered particular occupational groups; it was about the type of work done rather than the nature of the industry entered. This made pre-1980 figures incomparable with later figures on jobs entered by fifth year leavers as presented in Annual Reports. The scale of the difference of approach can be appreciated by the following example: in the pre-1980 classification an office junior employed by a mechanical engineering firm would have been included in 'mechanical engineering' (which was part of the manufacturing

group of SIC's), yet under the new classification they would come under the 'office' occupational group. A full explanation of the activities included in each occupational group is shown in Appendix 6. The analysis here only covers 1980-83.

The data presented in this section is not compatible with the data in Section (vi). This is because, for the number of fifth formers in work in the main figures at the front of the Annual Report the totals excluded special school leavers and 'out of town' leavers - (fifth year leavers who lived outside the Coventry Local Education Authority (LEA), but who were registered with the CCS, or young people who were not in the original year group as they had been to non-Coventry schools or had moved into the City since the August school leaving date). But in the occupational group analysis at the back of each report these groups were included. Let us now turn to the actual figures.

The occupational group figures presented in Tables 5.6/7 are surprising in a number of ways. First, the proportion entering manufacturing jobs went down but remained substantial. If the engineering, scientific, manufacturing and electrical, (most of these were electrical engineering jobs [19]) (CCS:1982b), groups are taken as the manufacturing occupations, then manufacturing jobs took up 40% of all jobs entered by fifth form leavers in 1980 and 31% in 1983. At the peak of the recession in 1981, 41% of jobs entered were in manufacturing. The service occupations are even more difficult to piece together, but if we take the creative, hairdressing, retail, catering, caring, office and garage work occupational groups as the service occupations then these provided 39% of the jobs for fifth year leavers in 1980, but 52% in 1983. Thus, the second main point is that although the manufacturing jobs held up well as a proportion of the youth labour market, nevertheless the service occupations moved into dominance over the period surveyed. Building jobs changed little in importance, taking up 10% of jobs in 1980 and 8% in 1983.

A third important point is that, although service occupations grew in relative importance in the Coventry youth labour market, in absolute terms

Table 5.6 : THE NUMBER OF FIFTH YEAR SCHOOL LEAVERS WHO HAD FOUND WORK BY DECEMBER/JANUARY AFTER LEAVING SCHOOL - BY OCCUPATIONAL GROUP

YEAR>	1980	1981	1982	1983
OCCUPATIONAL GROUP				
AGRICULTURE & SPORT	28	25	16	20
BUILDING	140	102	73	61
CREATIVE	20	9	17	10
HAIRDRESSING	52	26	52	44
RETAIL	190	167	133	137
ENGINEERING	435	314	211	160
MANUFACTURING (OTHER)	49	64	34	32
ELECTRICAL	93	20	20	27
CATERING	54	33	24	35
MINING	11	4	1	6
CARING	13	10	16	20
OFFICE	183	106	111	103
UNIFORMED SERVICES	136	66	31	36
SCIENTIFIC	15	6	5	5
TRANSPORT/GARAGE WORK	56	26	34	31
NOT SPECIFIED/UNCLASSIFIED	0	0	0	6
TOTALS	1,475	978	778	733

Source: Coventry Careers Service Annual Reports and Coventry Education Department Programme Development Group

the number of service jobs fell by exactly a third. The Coventry youth labour market became a service dominated market not because services filled the gap left by declining jobs in manufacturing but because service occupations declined less steeply in absolute terms. There were less service jobs for school leavers in 1983 as compared with 1980 but the drop in manufacturing employment was nearly twice as sharp. In individual occupational groups very sharp drops were recorded; in engineering the

number of jobs fell by 63%, in office work by 44%, in building by 56%, electrical 63%, retail 28% and in garage work by 45%. Only caring recorded an increase, of 54% - but low numbers of jobs were involved.

During 1980/81, when the CEES was undertaken, the fall in service employment was actually greater than the drop in manufacturing jobs; services fell by 34% as against 32% for manufacturing. It was after the peak of the recession, from 1982 that service occupations consolidated and did better than manufacturing. In 1980/81 some of the service occupations fell very steeply; garage work by 54%, creative work by 55%, hairdressing by 50%, office work by 42% and catering by 39%. Apart from electrical, which fell by 79%, and the numerically insignificant scientific occupational group (which fell 60%), the other two manufacturing groups held up well 1980/81. Indeed, the manufacturing (other) group gained jobs 1980/81, with an increase of 31%. Engineering fell by 28% - a much smaller fall than in many of the service groups, and smaller than the average fall in employment for all groups; 34%. Thus, in relative terms, the engineering group did not suffer particularly compared with other groups at the peak of the recession and at the point at which the CEES fieldwork was being done.

Gender Consequences of Changes in the Coventry Youth Labour Market 1980-83

Chapter Twenty-two shows that the vast majority of young people taken on as apprentices in engineering were males. Certainly, the trends described above had different consequences for boys and girls. In 1980, 41% of all jobs entered by boys were jobs in engineering. For boys, job opportunities were more concentrated in one particular occupational group than for girls. Of course, a few groups were 'no-go' areas for girls; there were never any girls in building or in mining, but for the other groups girls opportunities were more evenly spread. Indeed, for the boys, the 1980/81 peak of the recession had the effect of constraining job opportunities even further, with 44% going into engineering in 1981. For girls, the largest employing group, office work, took 36% of girls' jobs in 1980, but only 30% in 1981. The opposite was happening with girls; their job choices were widening out

in relative terms.

In absolute terms, boys had a clear advantage; 1,043 got jobs in 1980 as against only 432 girls. Boys took up 71% of all jobs in 1980, 70% in 1981, 63% in 1982 and 61% in 1983. Hence, although the gap narrowed over the period, due to traditional boys jobs in manufacturing, building and mining disappearing at a faster rate than traditional girls jobs in the service sector, boys still held a clear advantage in the Coventry youth labour market after the recession. Using statistics from CCS (1982i), it can be calculated that 18% of the fifth year boys were in work yet only 11% of the fifth year girls by December 1982.^[19]

Table 5.7 : PERCENTAGE OF FIFTH YEAR SCHOOL LEAVERS WHO HAD FOUND WORK BY DECEMBER/JANUARY AFTER LEAVING SCHOOL - BY OCCUPATIONAL GROUP

YEAR> OCCUPATIONAL GROUP	1980 (n=1475)	1981 (n=978)	1982 (n=778)	1983 (n=733)
AGRICULTURE & SPORT	1.9	2.6	2.1	2.7
BUILDING	9.5	10.4	9.4	8.3
CREATIVE	1.4	0.9	2.2	1.4
HAIRDRESSING	3.5	2.7	6.7	6.0
RETAIL	12.9	17.1	17.1	18.7
ENGINEERING	29.5	32.1	27.1	21.8
MANUFACTURING (OTHER)	3.3	6.5	4.4	4.4
ELECTRICAL	6.3	2.0	2.6	3.7
CATERING	3.7	3.4	3.1	4.8
MINING	0.7	0.4	0.1	0.8
CARING	0.9	1.0	2.1	2.7
OFFICE	12.4	10.8	14.3	14.1
UNIFORMED SERVICES	9.2	6.7	4.0	4.9
SCIENTIFIC	1.0	0.6	0.6	0.7
TRANSPORT/GARAGE WORK	3.8	2.7	4.4	4.2
NOT SPECIFIED/UNCLASSIFIED	0.0	0.0	0.0	0.8
TOTAL	100.0	99.9	100.2	100.0

Source: Coventry Careers Service Annual Reports and Education Department Programme Development Group

Above all this section shows that there was a high degree of concentration of job opportunities in engineering in the Coventry youth labour market. About a quarter to a third of all jobs were in engineering for fifth form leavers. Although the proportion of jobs that were in engineering fell to 22% in 1983, in 1984 the proportion rose again to 27% (CCS:1984). Job choice for fifth form leavers was particularly constrained at the time of my CEES fieldwork and by 1981 nearly a third of all jobs were in engineering and just over two-fifths of all boys jobs entered engineering. For skilled work the dominance of engineering was even more marked, as the following two sections indicate.

(viii) Fifth Form School Leavers Entering Apprenticeships in Coventry

Coventry Careers Service data on apprenticeships is extremely patchy. The figures in this section come from CCS Annual Reports. Data on apprenticeships effectively ends in these reports after 1979, for in 1980 onwards the figures given are for those on 'craft or other systematic training schemes' lasting longer than one year. Apprenticeships and traineeships, (which were separated in pre-1980 reports), were lumped together. From 1983, with the advent of YTS, even figures on those on systematic training schemes as defined above were omitted as large numbers of those who were technically apprentices or trainees did their first year on YTS, confounding any worthwhile comparisons with previous years' data.

There were other quirks in the data. It was noted earlier that there were differences between the totals by destination at the front of the reports and the 'Jobs Entered by Fifth Form Leavers' analysis at the back of each report. The former sometimes excluded special school and 'out of town' leavers whereas these were generally included in the latter analyses. The 1978 figures were particularly strange; unlike later years the analysis at the end was on those who had been in work since leaving school - not those in work at the time of the report being compiled. Again, later reports tended to base the analysis on the latter. These considerations made it impossible to put together a consistent set of statistics, but the

figures do show important trends in the Coventry youth labour market; trends which illustrate the increasingly constrained choice regarding the careers that Coventry fifth form leavers were being faced with. Moreover, the statistics were comprehensive insofar as they covered the experience of the whole year group. They were the best available.

Apprenticeships were taking up an increasing proportion of the jobs for fifth form leavers in Coventry throughout the 1970s. This is shown in Table 5.8. From just below a quarter of all jobs for fifth form leavers being apprenticeships in the early 1970s, nearly a third of all fifth form leavers jobs were apprenticeships in the late 1970s. Apprenticeships for boys were at a very high level in 1978; 43% of all boys jobs were apprentices - although the level fell back to below the average for the period in 1979. On average, just over a quarter of all jobs for the 1973-79 period were apprenticeships and for boys nearly two-fifths of all jobs, on average, were apprenticeships.

Table 5.9 examines those fifth form leavers who received some sort of systematic skills training; that is, they were either apprentices or trainees (where in the latter, training was for more than one year). During 1973-82, on average, 43% of all fifth form leavers who entered employment were apprentices/trainees. As the squeeze on youth jobs came in the early 1980s the proportion of fifth form leavers in work who were apprentices/trainees rose. Skilled and semi-skilled youth jobs were taking an increasing proportion of the youth labour market, (although these were also falling in absolute terms, but less quickly than unskilled youth jobs). For boys, the situation was such that over a half and up to nearly two thirds of all jobs in peak years were apprenticeships/traineeships. On average, for boys, 57% of jobs were apprenticeships/traineeships. For girls, the proportion of jobs entered that were apprenticeships/traineeships rose substantially during the 1979-82 recession to reach a record of 35% in 1982. Neither was this just because girls' semi-/skilled jobs were disappearing at a slower rate than unskilled jobs. There was an absolute increase in girls semi-skilled/skilled jobs from 73 to 101 from 1980 to 1982.

Table 5.8 : FIFTH FORM LEAVERS ENTERING APPRENTICESHIPS IN COVENTRY 1973-1979 - BY SEX : PERCENTAGE OF THOSE IN WORK WHO WERE APPRENTICES - BY SEX Source: Coventry Careers Service Annual Reports

YEAR> SEX	1973 No.	1974 No.	1975 No.	1976 No.	1977 No.	1978 No.	1979 No.	AVERAGES 1973-1979 No.
BOYS	473	541	605	551	573	666	604	573
GIRLS	34	119	113	61	89	63	87	81
ALL	507	660	718	612	662	729	691	654

NUMBER OF FIFTH FORM LEAVERS IN WORK

BOYS	1,276	1,540	1,521	1,541	1,617	1,542	1,686	1,532
GIRLS	1,033	1,294	890	813	883	748	849	930
ALL	2,309	2,834	2,411	2,354	2,500	2,290	2,535	2,462

PERCENTAGE OF THOSE IN WORK WHO WERE APPRENTICES

BOYS	37	35	40	36	35	43	36	37
GIRLS	3	9	13	8	10	8	10	9
ALL	22	23	30	26	27	32	27	27

Table 5.9 : FIFTH FORM LEAVERS ENTERING APPRENTICESHIPS/OTHER SYSTEMATIC TRAINING SCHEMES LASTING MORE THAN ONE YEAR (TRAINEESHIPS), 1973-1982 : % OF THOSE IN WORK WHO WERE APPRENTICES/TRAINEES - BOTH BY SEX
Source: Coventry Careers Service Annual Reports

YEAR SEX	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	AVERAGE 1973-82
BOYS	826	868	992	799	919	944	930	522	398	278	741
GIRLS	177	289	150	98	166	114	120	73	60	101	135
ALL	1,003	1,157	1,071	897	1,085	1,058	1,050	595	458	379	875

NUMBER OF FIFTH FORM LEAVERS IN WORK

BOYS	1,276	1,540	1,521	1,541	1,617	1,542	1,686	1,043	688	490	1,294
GIRLS	1,033	1,294	890	813	883	748	849	432	290	288	752
ALL	2,309	2,834	2,411	2,354	2,500	2,290	2,535	1,475	978	778	2,046

PERCENTAGE OF THOSE IN WORK WHO WERE APPRENTICES/TRAINEES

BOYS	65	56	61	52	57	61	55	50	58	57	57
GIRLS	17	22	17	12	19	15	14	17	21	35	18
ALL	43	41	44	38	43	46	41	40	47	49	43

In absolute terms, the numbers of fifth formers going into semi-skilled and skilled jobs was very low in the early 1980s - only 278 in 1982. Not only were employers cutting training staff and facilities as part of cutting overall costs during a period of recession, but external pressures on labour demand to take on apprentices/trainees were very weak. This was because increasing numbers of semi-skilled and skilled workers were on the dole, victims of redundancies.^[20] It was cheaper and quicker to take these older workers on. Coventry firms were having very little difficulty in recruiting skilled manual workers by 1982 according to the Coventry Area Chamber of Commerce surveys.^[21] Although in June 1981, when the bulk of the CEES was completed, 57% of firms in the Coventry Chamber survey of that month reported difficulties in recruiting skilled manual workers.

Finally, let us turn to traditional indentured apprenticeships. It is at this point that the Lord Mayor's Secretariat Study comes into play. This study examined the registrations for indentured apprentices who were to become Freemen of the City on completion of their apprenticeships. Certain points need to be emphasised in relation to the figures presented below. There were CEES firms who had indentured apprenticeships but did not register with the Lord Mayor's Secretariat for various reasons. Some objected to the feudal overtones, emphasising that 'we were now in the twentieth century'. Others disliked the extra administration involved. Chapter Four showed that a few CEES employers did not have their apprentices indentured, or they were 'optional'. Also, the rules of the Freedomship, and especially those surrounding registration at the Lord Mayor's Secretariat, ensured that a number of firms were ineligible for registration.^[22]

Two rules particularly affected Freedomship registrations. Firstly, to qualify for the Freedomship of the City the apprentice had to be indentured for at least four years and registration had to take place within six months following the signing of the deeds of apprenticeship. This limited the Freedomship to apprentices who were taken on at sixteen in practice. A second important rule was that strictly only those who worked within four miles radius of St. Mary's Hall in the centre of Coventry were eligible for

registration. This rule excluded a sizable minority of firms in the CEES.

Despite these limitations, the figures are quite interesting, (see Table 5.10). They tend to support the trends exhibited in the CCS figures on apprenticeships. In particular, they show that traditional Coventry apprenticeships held up almost as well as the numbers of fifth formers going into any type of apprenticeship. Of course, strict comparisons cannot be made. It must be remembered that the Lord Mayor's figures show registrations, not when the apprentice was taken on or indentured. The figures suggest that the collapse of apprenticeships in Coventry did not really start until the early 1980s. The numbers going into apprenticeships was still bouyant, especially during the mid-late 1970s. The collapse came with the peak of recession in 1980-81. Near total devastation arrived with the onset of the YTS in 1983. Keeping with the Lord Mayor's Secretariat figures the next section examines engineering apprenticeship levels in Coventry.

(ix) Engineering Apprenticeships in Coventry

Engineering apprenticeships dominated the market for traditional Coventry apprenticeships. On average, three-quarters of all registrations for Freedomship of the City were for engineering in the 1970s (Table 5.10). For 1975-1978 the proportion exceeded 80%. A further point on engineering registrations. In the records it did not say what trades the apprentices were following, therefore the data had to be built up using the names of the firms, (which were given). Obviously, a firm called 'H.Smiths Sheet Metal Co.' was an engineering firm. But 'H. Smith and Sons Ltd.' was indeterminate. In the latter instances, information from the 'Yellow Pages', old newspapers and various records from the Coventry Local Studies Centre was used to track down the nature of these firms. For a small number of firms it was impossible to find what line of business they were engaged in. Typically these firms only registered one or two apprentices. Hence, it is possible that a few of these might have been engineering firms. On the other hand this underestimate of the number of engineering apprentices was

offset to a degree by the fact that it was necessary to assume that all apprentices in engineering firms were engineering apprentices. As the actual trade was not listed it is possible that some of the apprentices in engineering firms might have been non-engineering apprentices; for example, apprentice chefs in large firms. Thus, the data can at most show broad trends given these and other deficiencies noted in the previous section.

Returning to CCS statistics, the CCS Annual Reports show a similar but less overwhelming picture; engineering apprenticeships dominated the local youth labour market for skilled work. In 1975, 53% of all fifth form leavers who entered apprenticeships took up engineering apprenticeships. This proportion rose steadily to 59% in 1979.^[23] For boys, engineering was even more dominant; 63% of all fifth formers gaining apprenticeships in 1975 were engineering apprentices, and the 1979 figure was 64%.

The number of fifth formers entering engineering apprenticeships held firm in the 1970s. From 301 (4th and 5th years) going into engineering apprenticeships in 1963 to a peak of 463 in 1967, the figures of 388 (5th years) in 1975 and 417 in 1978 look quite respectable. Even the 1979 figure stood at 404. Certainly there was no collapse of engineering apprenticeships in Coventry in the 1970s. The problems really started in 1980 - when the CEES fieldwork began. In 1980, the total for engineering apprenticeships and traineeships (remembering that the CCS no longer gave separate figures), was only 331. By 1982 only 152 fifth formers entered engineering apprenticeships/traineeships. More fifth formers entered engineering apprenticeships in 1979 than entered engineering apprenticeships and traineeships together in 1980. The CEES research was undertaken at a point of profound crisis in the annals of Coventry engineering apprenticeships. Nevertheless, semi-skilled and skilled engineering jobs still had a big hold on the semi-/skilled youth labour market even in the early 1980s. In 1980, 56% of fifth form leavers who entered apprenticeships/traineeships went into engineering, excluding the electrical occupational group. The electrical group was mainly composed of electrical engineering jobs. Hence, if this group is included, then 68% of all apprenticeships/traineeships were in

Table 5.10 : TRADITIONAL COVENTRY APPRENTICESHIPS : REGISTRATIONS FOR FREEDOMSHIP

YEAR	1971	1972	1973	1974	1975	1976	1977	1978	1979	1971/79 Av.
Registrations from CEES firms	128	150	226	294	237	225	300	199	119	209
As % of Total Registrations	44	48	59	72	71	74	77	74	64	65
Registrations from Non-CEES Eng. firms	38	38	46	31	56	22	26	24	19	33
As % of Total Registrations	13	12	12	8	17	7	7	9	10	10
ALL Engineering Registrations	166	188	272	325	293	247	326	223	138	242
As % of Total Registrations	57	60	71	80	88	82	83	83	74	76
Non-Engineering Registrations	125	126	110	82	41	56	66	45	49	78
As % of Total Registrations	43	40	29	20	12	18	17	17	26	24
TOTAL Regists.	291	314	382	407	334	303	392	268	187	320

engineering in 1980. The figures for boys were even more decisive. In 1980, (excluding electrical), 63% of fifth form leavers who were in apprenticeships/traineeships were in engineering, and including electrical the figure was a staggering 76%. The proportions of semi-/skilled jobs entered by fifth formers that were engineering jobs declined in 1981-1982, but for boys the proportion was always over 50% (excluding) and 60% including the electrical group.

Two final points about the CCS figures. Obviously, some young people going into engineering, or any apprenticeships, were sixth formers. Some CEES firms took on technicians at 17 or even 18 (Chapter Twenty). Unfortunately, the CCS compiled little information on sixth-form and further education college leavers who entered apprenticeships. The exception was CCS (1976). This report revealed two important findings. Firstly, if the 5th, 6th form and college leaver figures are added together the dominance of engineering in the local apprenticeship market became even more decisive. Taking fifth year leavers only, 55% entering apprenticeships entered engineering apprenticeships. But taking 5th, 6th and college leavers together the percentage was identical. Secondly, 92% of all those going into engineering apprenticeships were 5th formers. Thus, not only does this underline the importance many firms attached to taking on apprentices at 16, but it also shows that we can make reasonable generalisation from a consideration of 5th year leavers only.

Finally, CCS (1982b) showed that a third of all jobs entered by 1982 fifth form leavers by October 1982 were in engineering and this contrasted favourably with the 36% of fifth form leavers in work who entered engineering jobs in 1979 (CCS:1979b). Thus, the recession might have decimated the total number on youth jobs in engineering, but in relative terms engineering held its own in the Coventry youth labour market even after 1979. CCS (1982b) also showed that apprenticeships made up 43% of jobs entered by 1982 fifth year leavers, that engineering apprenticeships made up 61% of all apprenticeships and that 80% of all engineering jobs were apprenticeships.

Table 5.11 : APPRENTICES RECRUITED IN 32 COMPANIES: 1968-1983* - SURVEY OF APPRENTICE RECRUITMENT 1980/81/82/83, CDEEA

<u>YEAR</u>	ENGINEERING CRAFT APPRENTICES RECRUITED IN 32 FIRMS	ENGINEERING TECHNICIAN APPRENTICES RECRUITED IN 32 FIRMS	ALL ENGINEERING APPRENTICES RECRUITED IN 32 FIRMS
1968	250	190	440
1969	287	201	488
1970	266	189	455
1971	186	141	309
1972	201	120	321
1973	194	111	305
1974	218	155	373
1975	213	190	403
1976	263	193	456
1977	265	199	464
1978	265	220	485
1979	250	275	525
1980	193	263	456
1981	95	153	248
1982	98	145	243
1983	81	86	167

* Number reduced to 31 in 1980, due to the closure of Renold Ltd.

Sources: CDEEA Survey of Apprentice Recruitment 1980/81/82/83; Economic Unit Treasurer's Department, Coventry City Council; and Coventry Education Department Programme Development Group.

These figures suggest that if a fifth form leaver wanted an apprenticeship, but was not committed to any particular trade, then engineering was offering the best chance of getting one. On the other hand, if a fifth form leaver was committed to working in the engineering industry it would help if he/she were also committed to getting an apprenticeship; semi-skilled and unskilled jobs in engineering were in relative short supply. I will argue in the next section that it was facts such as these about the Coventry youth labour market that made job choice difficult for school leavers in the City and recruitment hazardous for engineering employers. The final figures on engineering apprenticeships examined are those from the CDEEA. These figures have one big advantage over CCS statistics; they are a consistent set, with

no major changes of classifications or definitions. They are based on the numbers of apprentices (total, craft and technician) recruited in thirty-two Association firms, and the only change in the series was that the total number of firms was reduced to 31 in 1980 due to the closure of Renold Ltd.

The CDEEA figures, (Table 5.11), confirm our earlier observations. Not only was engineering apprentice recruitment holding up well, but it was steadily rising from 1973 to a peak in 1979. The crash came in 1980. Craft apprenticeships were particularly affected. From 1979-83, technician recruitment was above craft recruitment. By 1983 the totals had reached an absolute low. Technician recruitment fell to the level of craft recruitment. The YTS had arrived. Engineering apprenticeships, as previously known in Coventry, had at last reached the real crisis point.

(x) The Peculiarities of the Coventry Youth Labour Market

From an examination of the Coventry labour market as a whole in the opening sections, this chapter set a backdrop against which the picture of the local youth labour market could be surveyed. In turn, the examination of the youth labour market set the appropriate context for an assessment of the place of apprenticeships, and especially engineering apprenticeships, within the Coventry youth labour market. In both overall and youth labour markets in Coventry the dominance of manufacturing persisted up to the 1979-82 recession. Manufacturing lost its dominance in Coventry in the overall labour market in 1981. The youth labour market lagged a few years behind. But in both labour markets there was still a heavy reliance on manufacturing employment on national comparisons.

For the employment of male school leavers, manufacturing continued to be the major employment outlet. For male and female fifth form leavers together, manufacturing jobs provided 30-40% of employment 1980-83, but for boys only the proportion was just over 50% 1980-81, but dropping to 47% in 1982, 42% in 1983, but increasing to 46% in 1984. Engineering jobs took a large chunk of the total jobs entered by fifth form boys. Engineering accounted for 41% of all jobs entered by fifth form boys in 1980. In 1981 the proportion rose

to 44%. These percentages excluded the electrical occupational group, which was overwhelmingly electrical engineering. Together, the engineering and electrical groups provided 39-48% of all jobs for fifth form boys 1980-84.

Another significant feature of the male youth labour market in Coventry was that a half to two-thirds of all jobs involved systematic training of over a year in the 1973-82 period, and 50-58% in the recession and immediate post-recession period of 1980-83. The consequence for boys was that they stood more chance of a job in the tight Coventry youth labour market if they went for a job involving systematic training.

Apprenticeships as a whole held up well until 1980, when they went into almost terminal decline. Certainly, as far as apprenticeships/traineeships were concerned, the engineering occupational group dominated, providing 56% (excluding electrical) and 68% (including electrical) of all apprenticeships/traineeships in 1980. On apprenticeships alone, 61% of 1982 fifth form leavers who went into apprenticeships went into engineering apprenticeships. No doubt the percentage for male apprentices would have been higher, but the source data used for this calculation did not allow analysis by sex. Traditional Coventry apprenticeships were extremely dominated by engineering apprenticeships.

These summary statistics point to the highly constrained and restricted youth labour market situation in Coventry, especially for boys. Although boys' jobs were in greater supply than girls' jobs throughout the 1970s and early 1980s, the job choices faced by boys was highly restricted because of the nature of the youth labour market. A male fifth form leaver stood the best chance of getting a job if:

- a) - he went into manufacturing, and,
- b) - he chose engineering within the manufacturing sector, and,
- c) - he went for semi-skilled or skilled work, and,
- d) - he went for an apprenticeship.

In short, if you were a male fifth form leaver, not particularly committed to any particular career, but with reasonable qualifications,^[24] then an engineering apprenticeship was the best bet for a job. Engineering apprenticeships dominated in the structure of opportunity integral to the

P A R T T W O

[ATTRIBUTES SOUGHT IN APPLICANTS IN RECRUITMENT,
RECRUITMENT CRITERIA
AND THE COVENTRY ENGINEERING EMPLOYERS' STUDY]

The Coventry Engineering Employers' Study - Attributes Sought in Applicants
in Recruitment - Work Attitudes - Labour Power Attributes - Aspects of
Labour Power - Critique of the Needs of Industry.

* * * * *

Chapter SixA GENERAL ANALYSIS OF ATTRIBUTES SOUGHT IN APPLICANTS FOR ENGINEERING APPRENTICESHIPS(i) General Introduction

In this chapter, the basic question of what CEES employers were looking for in applicants is examined. Sections (iii)-(v) illustrate the relevant findings. Above all employers were looking for work attitudes. This has been a common finding of studies of youth recruitment in the last decade. Explanation of the dominance of work attitudes has been much rarer.

Explanations deriving from the nature of the CEES sample, the Coventry youth labour market and the literature on employers' needs are examined and found wanting. Two alternative general explanations are developed. The first rests on fundamental aspects of labour power. A series of distinctions are developed to illustrate this argument; some of these will be more generally useful in the thesis. Sections (vi)-(xiii) deal with these distinctions. The second argument rests on the underdevelopment of the social production of labour power (Section xiv). Section (xv) summarises the chapter.

The next section is also introductory. It outlines the approach to the study of the attributes the CEES employers sought in applicants in recruitment. It lays the foundation for Sections (iii)-(v).

(ii) Technical Introduction

The engineering employers were asked what they especially 'looked for' in an applicant for engineering apprenticeships. Altogether, 85 attributes were mentioned by the 107 employers. Fifty-two of these were mentioned more than once, and 18 attributes were mentioned five or more times. In total, there were 396 different references to the 85 attributes. In addition, fifty firms having both craft and technician training schemes were asked to note any differences in what they 'looked for' as between craft and technician

applicants. Only twelve firms, (5 Group E; 6 Group D; and one Group C firm), differentiated between craft and technician applicants in recruitment. In total there were:

1. 55 firms having craft training only
2. 50 firms having technician and craft training
3. 2 firms having technician training only.

Hence, 38 firms, (76%) out of the 50 firms having craft and technician schemes 'looked for' the same attributes in both potential craft and technician apprentices. Furthermore, of the twelve firms that did differentiate, only two made an absolute distinction between craft and technician in recruitment; the other firms differentiated **partially**. The other ten firms made it clear in the interview that certain attributes they mentioned applied to both craft and technician applicants, and others were for craft or technician only. From the perspective of **references** to the 85 attributes there were:

- (a) References from firms which had craft apprentices only,
- (b) References from firms which had craft and technician schemes, but pertained to craft apprentices only,
- (c) References from firms which had craft and technician schemes and pertained to both craft and technician apprentices,
- (d) References from firms which had craft and technician schemes, but pertained to technician apprentices only,
- (e) References from firms which had technician apprentices only.

It is clear that (a)-(b) references were basically references to attributes 'looked for' in applicants in relation to craft recruitment, and that (d)-(e) references related to technician recruitment. For the purpose of simplifying the analysis, references (a)-(b) will be amalgamated and classified as '**craft references**'; (d)-(e) become '**technician references**'.

Focussing on craft and technician references only ignores data from those 38 firms who had both craft and technician apprentices and did not differentiate between craft and technician regarding what they looked for in applicants. It would also ignore references that were relevant to both craft and technician for firms that differentiated partially. Taken together these

two categories formed the (c) references, which made up 42% of all references - a substantial component of the data under examination. Concentration on craft and technician references alone would fail to reflect this fact and would yield narrow conceptions of what was 'looked for' in engineering apprenticeship applicants. Thus, (c) references will be brought into the analysis in the following ways: 'craft related references' will refer to **all** references relevant to the recruitment of craft apprentices, that is, (a)-(c) references, and 'technician related references' will correspondingly refer to (c)-(e) references.

From the above, the following classification will form the pivot of the analysis:

1. Craft References...(of which there were 189)
2. Craft Related References...(of which there were 354)
3. Technician References...(of which there were only 42)
4. Technician Related References...(of which there were 207)

(iii) Analysis of (18) Attributes Referred to Five Times or More

In total, the eighteen attributes that were mentioned five or more times by the 107 firms accounted for 241, 61% of the 396 references. There were 111 craft references to the 18 most commonly mentioned attributes, (57% of all craft references), and 26 technician references, (62% of all technician references). Table 6.1 shows the eighteen attributes and the differences as between craft and technician as to what the CEES employers looked for in applicants. They are listed according to the number of firms mentioning each attribute; some firms mentioned the same attribute twice (for craft and technician). This is disregarded in the listing order. The importance of appearance for craft and qualifications for technician applicants dominates Table 6.1. Of equal importance is the fact that seven of the eighteen attributes related to work attitudes, (attributes 3,4,6,13,14,17 and 18). These accounted for 16% of all craft and 14% of all technician references.

Table 6.1 has clear limitations. The technician references to attributes 1-18 were based on only 26 technician references from 10 firms, providing a

weak basis for generalisation. But certainly, the craft references data in Table 6.1, which was based on references from 53 firms, could be said to give the most important attributes sought by engineering employers who thought purely in terms of the 'craft apprentice' and did not conjoin attributes sought in craft and technician applicants. The main shortcoming of Table 6.1 is that it ignores references from firms that had craft and technician apprentices but did not distinguish between them in the attributes looked for in recruitment. Table 6.2 takes into account all references that were relevant to craft and technician applicants. This yields a broader, more inclusive picture of the most important factors looked for in the recruitment of craft and technician apprentices.

Table 6.2 shows that the inclusion of the references from firms that had both craft and technician apprentices, and were looking for the same attributes in recruitment for both, altered the picture considerably for some attributes. For craft, qualifications and motivated/self-motivated assumed greater importance. Interest in job/trade declined in importance as between Tables 6.1/2. In the first two cases, these attributes were more commonly mentioned by large firms in relation to both craft and technician recruitment; thus many of these references were not in Table 6.1. References to interest in job/trade came largely from small firms employing craft apprentices only - which explains the relative importance of this factor in Table 6.1. Few firms with both craft and technician apprentices mentioned it which explains its 2% drop between the two Tables.

The technicians' data shows even greater change between Tables 6.1 and 6.2. Drops of four percentage points on qualifications and three points on articulate/talks well are readily understandable. These were particularly important for purely technician recruitment on the Table 6.1 analysis. Including references relating to both craft and technician tends to water down the salience of these attributes. Keen/enthusiastic was seen as something specific to either craft or technician; not one of the extra references entering Table 6.2 pertained to keen/enthusiastic. On the other hand, interest in engineering was the sort of factor that was looked for by engineering employers for both types of apprentice. What a

Table 6.1 : ANALYSIS OF CRAFT AND TECHNICIAN REFERENCES TO 18 ATTRIBUTES MENTIONED 5 OR MORE TIMES

ATTRIBUTES	CRAFT		TECHNICIAN	
	No. of times referred to	As % of Craft Refs. (n=189)	No. of times referred to	As % of Tech. Refs. (n=42)
1. Qualifications	14	7	7	17
2. Appearance	23	12	2	5
3. Good attitude to Work /Wants to Work.....	8	4	1	2
4. Interest in Engineering	7	4	0	0
5. Intelligence	9	5	0	0
6. Interest in Job/Trade	10	5	1	2
7. Hobbies/Interests/Sports	4	2	2	5
8. Ability to Mix/Fit In	5	3	1	2
9. Practical Ability	9	5	2	5
10 Articulate/Talks Well	2	1	3	7
11 Has Character/Personality	4	2	1	2
12 Good at Maths	4	2	1	2
13 Motivated/Self-Motivated	0	0	1	2
14 Keen/Enthusiastic	2	1	3	7
15 Clean	3	2	0	0
16 Pleasant Personality	4	2	1	2
17 Punctual/Good timekeeper	1	1	0	0
18 Willing to Learn	2	1	0	0
TOTAL	111	59	26	62

comparison of Tables 6.1/2 indicates is that there were some attributes that were particularly important for apprentice recruiters who tended to think specifically in terms of recruiting either craft or technician apprentices, but which were less important for those that did not differentiate between craft and technician in recruitment in terms of attributes sought in applicants. Then there were other attributes which played a greater role for those who did not differentiate between craft and technician in recruitment in terms of attributes sought (either in general or on

specific attributes). Both Tables show greater agreement on the factors looked for in technician than craft recruitment; the proportion of references to the 18 factors was higher for technician than craft on both analyses.

Table 6.2 : ANALYSIS OF CRAFT RELATED AND TECHNICIAN RELATED REFERENCES TO ATTRIBUTES MENTIONED FIVE OR MORE TIMES

ATTRIBUTES	CRAFT RELATED REFS.		TECH. RELATED REFS.	
	No. of times referred to	As % of Craft Related Refs. (n=354)	No. of times referred to	As % of Tech. Related Refs. (n=207)
1. Qualifications	33	9	26	13
2. Appearance	37	10	16	8
3. Good attitude to Work /Wants to Work...	15	4	8	4
4. Interest in Engineering	16	5	9	4
5. Intelligence	14	4	5	2
6. Interest in Job/Trade	11	3	2	1
7. Hobbies/Interests/Sports	11	3	9	4
8. Ability to Mix/Fit In	11	3	7	3
9. Practical Ability	11	3	4	2
10 Articulate/Talks Well	7	2	8	4
11 Has Character/Personality	8	2	5	2
12 Good at Maths	8	2	5	2
13 Motivated/Self-Motivated	7	2	8	4
14 Keen/Enthusiastic	5	1	6	3
15 Clean	6	2	3	1
16 Pleasant Personality	5	1	2	1
17 Punctual/Good timekeeper	5	1	4	2
18 Willing to Learn	5	1	3	1
TOTAL	215	61	130	63

Tables 6.1/2 share the assumption that a reference to the appearance of craft applicants from a firm employing only one craft apprentice was of equal weight to the same reference emanating from a firm with over 100 craft

apprentices. In terms of the consequences for young people looking for engineering apprenticeships, the fact that a large firm looked for appearance was more significant than a small firm with few apprentices looking for it. Hence, the criteria of recruitment used by the larger firms had greater social impact and practical application. Some of the larger firms in the sample processed thousands of apprenticeship applications. Thus, it would seem reasonable to examine the craft and technician related references through weighting each reference in accordance with the number of craft or technician apprentices employed by the firm that contributed each craft or technician related reference, and then to sum the totals for each attribute. The results of this process are illustrated in Table 6.3.

One interesting feature in the technicians' data in Table 6.3 is the rise of motivated/self-motivated as the second most important factor after qualifications. Ability to mix/fit in also rises dramatically as between Tables 6.2/3, and practical ability rose by four percentage points as between these two Tables. These results show that these attributes were particularly important for the large firms employing substantial numbers of apprentices. On the other hand, appearance in the technicians' data in Table 6.3 becomes much less important as compared with Tables 6.1/2. This was because those firms looking at the appearance of technician applicants in recruitment were smaller than the firms that looked for attributes such as practical ability. In the case of the technician' data weighting by number of apprentices had a substantial effect on the outcome. Minex was by far the largest technician recruiter in the sample. Most of the big swings between Tables 6.1/3 can be explained on the basis of whether Minex referred to a particular attribute or not. For craft apprentices in Table 6.3, there was a corresponding rise in the importance of motivated/self-motivated and a further decline in the importance of interest in job/trade, and a further rise in the importance of interest in engineering, ability to mix/fit in and hobbies/interests/sports. The large craft recruiters tended to look for these factors in particular. On the other hand, interest in job/trade, a factor largely mentioned by small firms only in relation to craft

Table 6.3 : WEIGHTED CRAFT AND TECHNICIAN RELATED REFERENCES

ATTRIBUTES	WEIGHTED CRAFT RELATED REFS.		WEIGHTED TECHNICIAN RELATED REFS.	
	$\sum \frac{r1(y)-r18(y)}{r18(y)}$	% of all WCR Refs (n=4325)	$\sum \frac{r1(z)-r18(z)}{r18(z)}$	% of all WTR Refs (n=4283)
1. Qualifications	469	10.8	529	12.4
2. Appearance	478	11.0	202	4.7
3. Good attitude to Work/Wants to Work	89	2.1	68	1.6
4. Interest in Engineering	267	6.2	96	2.2
5. Intelligence	47	1.1	7	0.2
6. Interest in Job/Trade	31	0.7	197	4.6
7. Hobbies/Interests/Sports	176	4.1	215	5.0
8. Ability to Mix/Fit In	219	5.1	362	8.5
9. Practical Ability	244	5.6	272	6.4
10 Articulate/Talks Well	89	2.1	332	7.8
11 Has Character/Personality	142	3.3	74	1.7
12 Good at Maths	39	0.9	5	0.1
13 Motivated/Self-Motivated	349	8.1	370	8.6
14 Keen/Enthusiastic	70	1.6	231	5.4
15 Clean	33	0.8	4	0.1
16 Pleasant Personality	40	0.9	40	0.9
17 Punctual/Good timekeeper	27	0.6	17	0.4
18 Willing to Learn	16	0.4	4	0.1
TOTAL r1 - r18	2825	65.3	3025	70.6

Notes: r1 - r18 = A Reference to factors 1-18 from a particular firm
y = Number of Craft apprentices of a particular firm mentioning one of the factors 1-18
z = Number of Technician apprentices of a particular firm mentioning one of the factors 1-18
WCR = Weighted Craft Related References
WTR = Weighted Technician Related References

recruitment, went down in significance on the weighted craft related reference analysis because of this fact. In general the weighting effect was not as great for the craft as the technician data.

So far, only the eighteen most important attributes have been examined. The following section brings in all references to all attributes. It provides an overall assessment of what attributes engineering employers were looking for

in apprenticeship applicants through classifying the attributes into broad general groups. Appendix 7 shows the overall classification of attributes.

(iv) Aggregated Attributes

Section (iii) examined the eighteen most important attributes looked for by employers in the CEES, but the analysis there left out sixty-seven other attributes. A detailed analysis of references to all eighty-five attributes is untenable. Thus, to make the work manageable, but also to illustrate an overall picture of the attributes sought in apprenticeship applicants, some method of aggregating the eighty-five attributes is required. Initially, the possibility of grouping the attributes into 'natural' groupings was explored. Various options were pursued. Cuming (1983) was useful here.^[1]

In his study of employers in Leicestershire, Cuming asked the following general question: 'What do you look for in an applicant at interview?' (p.82). This question was slightly different to mine, with more emphasis on what was looked for in the interview rather than what was generally 'looked for' in applicants. It was also asked in relation to all employees, not just young people. But Cuming was faced with a similar problem of categorising the attributes sought by employers and his approach was instructive. Cuming's employers referred to 91 different attributes. He justifiably noted that: 'The analysis and classification of such responses is lengthy and tends to be subjective' (ibid.p.42). Yet, argued Cuming:

'For analytical purposes it is obviously necessary to reduce the list... to more manageable proportions.' (ibid.p.71).

He classified the attributes sought by employers into the eight groups: personality traits; social attitudes; work attitudes; learned skills; general abilities; qualifications; physical abilities and circumstantial elements (which also included unclassifiable attributes). Cuming did not give conceptual definitions of each of the categories. In his Appendix 8 he gave lists of the attributes constituting each category. Observation of these indicates what Cuming and his associates had in mind when they were

talking about 'work attitudes', for example.

On personality traits, Cuming included items of a person's character such as 'extrovert' or 'patient'. These traits referred to types of social behaviour which were perceived by the employers as manifesting 'extrovertness' and so on. Work attitudes referred to ways of thinking that had direct relevance to working for the employer concerned, such as: 'efficient' or 'able to accept boring work'. These work attitudes centred around wanting to work under conditions controlled by the employer. Social attitudes were more general attitudes relating to the work situation as a whole, such as: 'responsible' and 'polite'. Learned skills were certain competences learnt at school or elsewhere deemed relevant to production, such as: 'able to write', and 'good telephone manner'.

General abilities referred to perceived 'natural' abilities, essential parts of the person: 'intelligence', 'has commonsense', were typical. Qualifications included attributes like 'able to pass company selection test' and 'has good references/reports/school record', as well as references to formal qualifications. Physical abilities was straightforward. Finally, Cuming's circumstantial elements included items like 'has smart appearance' and 'does not live far away'. The emphasis was on certain circumstances that the individual applicants were expected to be in at the point of recruitment.

Cuming noted the difficulty involved in placing some attributes in the eight categories. To resolve this, he got together the members of his project team who initially undertook the classification individually and then differences were 'resolved mutually'(ibid.). Where agreement could not be reached attributes were placed in the circumstantial elements (other) category. As far as possible, and was reasonable in terms of the CEES employers' responses, the analysis in this section keeps to Cuming's classifications, although there were a few differences.^[2] Furthermore, a number of attributes appearing in the CEES results did not feature in Cuming's lists at all. These attributes were assigned to the various categories by myself.

A further difference between the analysis here and Cuming's is that the work

attitudes category was broken down into two: general and specific work attitudes. The former related broadly to Cuming's original work attitudes. The latter referred to work attitudes relating to the engineering industry or specific jobs or trades within engineering and aspects of these; such as the apprenticeship, study at technical college, skilled status.

Another difference was that in Cuming circumstantial elements was split into: appearance, social and leisure activities and circumstantial elements (other). In the CEES results appearance was very important for craft recruitment, hence it was included separately, and social and leisure activities was particularly important for technicians and also categorised separately. The attributes mentioned by Cuming's and the CEES' employers can be compared in Appendix 7.

Results

Table 6.4 shows that for craft, attitudes and personality traits were crucial; 55% of all (weighted) references were to attitudes or personality traits, 40% related to attitudes and just over a third to work attitudes. Chapter Eight will argue that there was a strong link in the minds of the CEES employers between appearance and work attitudes. The former acted as a guide to the latter. Thus, it was not surprising to find that 12% of references in Table 6.4 went to appearance. Work attitudes were more important for craft than technician, and this partly explains the difference in the appearance findings. Physical qualities received a surprisingly low priority for craft; five firms referred to physical qualities for craft and two for technicians. The fact that one of the two firms referring to it for technicians was Minex Communications with its 196 technician apprentices accounts for the higher technician percentage.

Table 6.4 shows that qualifications were important for technicians. This reflects the fact that colleges stipulated certain subjects and grades for TEC course entry. Chapter Nine gives details on the qualifications demanded. Also, with high grades, recruits could start on a higher level course, TEC

Table 6.4 : AGGREGATED ATTRIBUTES

ATTRIBUTES	CRAFT RELATED REFS. (Weighted)(n=4325) Score %	TECH. RELATED REFS. (Weighted) (n=4283) Score %	ALL RELATED REFS. (Weighted)(n=8784) Score %
WORK ATTITUDES- GENERAL	674	699	1373
WORK ATTITUDES- SPECIFIC	831	395	1226
SOCIAL ATTITUDES	235	434	669
PERSONALITY TRAITS	636	701	1381
GENERAL ABILITIES	357	378	735
LEARNED SKILLS	119	307	470
QUALIFICATIONS	534	708	1330
PHYSICAL QUALITIES	76	197	273
APPEARANCE	522	212	734
SOCIAL & LEISURE ACTIVITIES	176	215	391
CIRCUMSTANTIAL ELEMENTS & (OTHERS)	165	37	202
TOTALS	4325	4283	8784
	100	100	99

- Notes:1 - Craft and Technician related references were weighted by the number of craft and Technician apprentices within the firms mentioning them respectively.
- 2 - All related references were weighted by the total number of craft and technician apprentices within firms mentioning them. The All scores do not always equal the craft plus technician scores. Morton James Precision did not differentiate between craft and technician and hence did not figure in the craft and technician data. The total 176 score of Morton James was included in the All score for Personality Traits (44), Learned Skills (44), Qualifications (88) and the Total (176).

level two. The importance of social attitudes for technicians reflects their position in the labour process where mixing with management and shopfloor was often central to their role; hence attributes such as 'co-operative' and 'responsible' were more sought after. This issue is taken up in detail in Chapter Eight. It goes some way to explaining the high score for personality traits for technicians as well.

(v) Analysis of the 'Most Important Factor' - MGTS Firms

MGTS firms were asked to say which of the factors they had verbally listed was the the most important. They were asked to note any differences between craft and technician. It was feared that given tape-recorded interviews some employers might forget some of the factors they had listed when talking about what they looked for in applicants. Only two firms were inconsistent to the extent of mentioning 'most important factors' that were not in their original list of factors.

For craft, three attributes stood out: good attitude to work/wants to work, interest in engineering and practical ability were clearly the central 'most important' attributes. However, it should be noted that there was little agreement within the craft data. There were 31 factors mentioned by the 47 MGTS craft recruiting firms and none of these factors was mentioned by more than 10% of them.

The situation was similar for technicians; there was little agreement on which was the 'most important' factor in technician recruitment. Again, three attributes stood out as significantly more important than the rest; good attitude to work/wants to work, intelligence and qualifications. The twenty-five MGTS technician recruiters mentioned 21 factors between them. None of the factors was mentioned by more than 5% of technician recruiters.

Table 6.5 brings depth to the data by allocating the individual factors to the broad categories of attributes used earlier. The related references to the various factors were weighted by the number of craft and technician apprentices within the firms mentioning them. Where two or more factors were

ranked as 'equal' then the weighting was proportionally allocated.

Five main points should be noted in relation to Table 6.5. First, the importance of work attitudes for craft, which took up nearly two-fifths of all craft 'most important' weighted related references. Work attitudes were nearly three times as important for craft as they were for technician recruitment. Secondly, within the work attitudes there were important differences. Specific work attitudes were much more important for craft than technician recruitment. Specific work attitudes were more important than general work attitudes for craft. For technician recruitment, general work attitudes were much more important than specific work attitudes. Specific work attitudes were marginal to technician recruitment. Thus, when the employers were looking for attributes such as interest in engineering, and where these attributes were the most important individual factors, they were generally used in relation to craft recruitment. When the employers were looking for applicants with an interest in engineering this had special resonance in relation to craft recruitment. Thirdly, personality traits were nearly three times as important for technicians than craft. Technician recruitment was almost as much about looking for applicants with the right personality as craft recruitment was about looking for applicants with the right work attitudes. Fourthly, qualifications was nearly twice as important for technicians than craft; a greater difference than on any previous analyses in earlier sections. Finally, the overall impression left by the data in Table 6.5 is that there was a clearer differentiation in attributes sought in the recruitment of craft and technician apprentices than was hitherto indicated in earlier sections. There, the differences between the two did not appear to be all that great. The differentiation can be seen most strikingly as the data on work attitudes and personality traits drifts apart between craft and technician between Tables 6.4/5. However, we cannot rely too much on the MGTS technicians' data as MGTS technician recruiters were not that representative of technician recruiters in the total sample; few large firms with technicians were included in Table 6.5. Nevertheless, MGTS technician recruiters seemed obsessed with appearance and personality traits as compared with the total CEES sample, more concerned with

qualifications and less bothered with work and social attitudes.

Table 6.5 : AGGREGATED ATTRIBUTES - ON THE 'MOST IMPORTANT FACTOR' IN RECRUITMENT - MGTS FIRMS ONLY

CATEGORIES OF AGGREGATED ATTRIBUTES	CRAFT Related Refs. (Weighted)(n=310) %	TECH. Related Refs. (Weighted)(n=70) %
1. WORK ATTITUDES (GENERAL)	16	11
2. WORK ATTITUDES (SPECIFIC)	23	2
3. ALL WORK ATTITUDES	39	14
4. SOCIAL ATTITUDES	6	2
5. PERSONALITY TRAITS	10	28
6. GENERAL ABILITY	11	6
7. LEARNED SKILLS	7	2
8. QUALIFICATIONS	12	21
9. PHYSICAL QUALITIES	1	0
10 APPEARANCE	9	23
11 SOCIAL & LEISURE ACTIVITIES	0	0
12 CIRCUMSTANTIAL ELEMENTS (OTHER)	4	0
13 CIRCUMSTANTIAL ELEMENTS (10-12)	13	23

For craft, when the chips were down, a lot rode on work attitudes, with qualifications and personality traits providing important background considerations. Chapter Eight argues that appearance was an indicator of work attitudes for craft. Technician recruitment was basically concerned with personality traits and qualifications with general work attitudes providing an important background consideration. It will be argued in Chapter Eight that appearance functioned as an indicator of personality

traits in the first instance and work attitudes in the second in technician recruitment. It also functioned in its own right, as appearance per se was important in the drawing office and other technician jobs. This is generalising and differentiating between craft and technician in the extreme, but as an overall general conclusion on the most important criteria of recruitment, the most decisive attributes sought, it is the best available.

The next section tackles the obvious general point; why were work attitudes so important within the attributes sought in applicants for engineering apprenticeship? It examines this point within the orbit of the CEES, theoretical development, new distinctions and the work on the labour market in Chapter Five.

(vi) Work Attitudes

One hypothesis, deriving from the nature of the sample, is that the MGTS employers did not need to think about learned skills and qualifications so much as non-MGTS employers; these were sorted out for them by the MGTS. MGTS employers could concentrate on personal and attitudinal attributes, secure in the knowledge that learned skills had been assessed (in tests) and that MGTS set their own qualifications standards. If the hypothesis was true, then MGTS firms should have given more weight to work attitudes and less to learned skills and qualification as compared with non-MGTS firms.

Analysis of weighted related references lends scant support to the hypothesis. For craft, general work attitudes for MGTS firms constituted 12% of weighted related references and specific work attitudes 14%. Overall, work attitudes constituted 25%. The corresponding non-MGTS figures were 17%, 21% and 38% - a clear rebuttal of the hypothesis. Learned skills constituted 7% for MGTS firms but only 1% of non-MGTS, and qualifications 18% of MGTS and 10% of non-MGTS weighted related references. On all four classes of attributes the hypothesis falls.

For technicians, general work attitudes constituted 14% of weighted related

references for MGTS firms and 16% for non-MGTS; on specific work attitudes, 5% for MGTS and 9% for non-MGTS; on learned skills, 2% for MGTS and 7% for non-MGTS; on qualifications, 32% for MGTS and only 16% for non-MGTS. The hypothesis is supported on one out of the four classes of attributes.

There was insufficient evidence that the nature of the sample determined the importance given to work attitudes. The hypothesis that: as MGTS firms had applicants sorted out by MGTS on learned skills (through tests) and MGTS qualifications criteria, therefore they could concentrate more on work attitudes - was not generally supported by analysis.

Other possibilities must be sought. A general explanation referred to in Chapter Five: that the structure of the youth labour market in Coventry induced young people to enter engineering who were not interested in engineering and engendered a general crisis of interest in engineering (according to Coventry engineering employers) and this in turn led to them to place more stress on specific work attitudes - seems to hold credence as an explanation. Chapters Eight and Twelve examine this explanation.

This can only be a partial explanation. First, the phenomenon of youth entering jobs that were not of their first choice, or which they did not immediately like, has been widespread in the last decade. It is not something peculiar to Coventry. Furlong (1987) found that most school leavers in his Leicester study were not in their first choice jobs. Indeed, 40% still had hopes of leaving their current jobs to get into their chosen jobs. Brown (1987b) found a similar result in his study of a town in South Wales. Sawdon, Pelican and Tucker (1981) found that for youth in Berwick and London it was not personal characteristics or qualifications that determined jobs entered, or subjective choice, but what was available. No complex choices were made. Jobs entered depended on choosing within those available within 2½ miles distance of home, and gender (ibid.pp151-152). Gleeson and Mardle's (1982) study of the Stoke-on-Trent youth labour market led them to conclude that job choice was a myth in Stoke; it was either 'pits, pots or engineering' (p.28). These studies show that in a variety of youth labour markets job choice was limited to what was available, although as Roberts

(1984) has noted, exactly how many school leavers obtain jobs consistent with their first choice depends on the quantity and breadth of local opportunities; thus there is a role for the Coventry youth labour market in the explanation of the importance of work attitudes.

Roberts underlined the general point that for all youth labour markets this role must be a limited one as:

'Neither school leavers nor adults typically choose their jobs...they simply take what is available.' (in Furlong (1987,p59)).

Bates (1981) argued that the notion of occupational choice amongst school leavers was a myth. Job choice depended on opportunity structure. Others made the same point (Roberts:1980; Gleeson and Mardle:1982). Nash (1986) argued that labour market structures confront school leavers as an 'oppressive facticity'(p.173) about which they can do little. Choice is made within a given labour market structure. Blackburn and Mann (1979) argued that this applied to adults too, even in such a relatively vibrant labour market as Peterborough. Labour market segmentation theory has pointed to the ways in which youth and adult labour markets do 'not operate on a principle of free allocation which permits choice and equal access' (Blackman:1987), but filter people into jobs in a dual labour market situation according to sex, race, age skill and occupational criteria (Buswell:1986; Lee,Marsden, Hardey,Rickman and Masters:1987; Ashton, Maguire and Spilsbury:1987). Roberts (1980) has convincingly argued that the myth of job choice was a result of the post-War boom.

What these arguments show is that the lack of control youth have over the jobs they enter is a general phenomenon. The Coventry youth labour market cannot provide a specific explanation of the importance of work attitudes in the CEES, as the position of youth in the labour market is a general phenomenon in relation to job choice. Coventry's constrained youth labour market is irrelevant in a general situation of constricted job choice.

Another reason why the Coventry youth labour market cannot be paramount in explaining the importance of work attitudes is that the dominance of work attitudes in studies of youth recruitment was a common phenomenon. A general

explanation of this dominance is required. The Manpower Services Commission (1978), found that 81% said that 'a willingness to work/attitude to work' was the most important attribute sought in applicants for youth jobs. In Finn and Markall's (1981a,b) study of Salford, 70% said 'willingness/right attitude' was the most important characteristic in a potential recruit to skilled manual work. The figure for semi-unskilled work was 83%. Overall, willingness to work was the most important characteristic sought. Williams' (1981) study of 300 employers in England and Wales concluded that employers believed that 'willingness to work hard' and 'willingness to learn' were the most important attributes in the recruitment of young people. Ashton and Maguire's (1980b) study of Leicester, St.Albans and Sunderland youth labour markets found work attitudes to be the most important attributes sought in young recruits. They noted that:

'The overwhelming concern was over the young person's attitude to work, mentioned by 77 out of the 101 firms interviewed.'(p.152.).

Hunt and Small's (1981) study of the Lanarkshire and Border areas of South East Scotland found that employers rated personal characteristics above qualifications. Finally, Cuming (1983) found that work attitudes was the most important class of attributes sought in three of the eight industrial groups that he surveyed in Leicestershire. Overall, work attitudes was the most important class of attributes.

On the whole, these studies showed that work attitudes was the dominant class of attributes sought in young recruits across a range of youth labour markets in Britain. They did not give any explanations of why work attitudes should be the dominant consideration in the recruitment of youth. Instead, there was a 'stand back in amazement' attitude towards the dominance of work attitudes, as though pointing out this dominance was sufficient in itself. The remaining sections turn to the issue of importance of work attitudes. They also make certain distinctions which aid this enterprise and are used in analysis in other chapters. The next section looks at how the secondary literature tackles the issue.

(vii) Work Attitudes: Stand Back in Amazement Once More

There is substantial comment on the centrality of work attitudes in recruitment to youth jobs. The importance of work attitudes has been copiously highlighted: (Brunton Report:1973; Elles Report:1974; Frith:1978b,1980a,b; Green:1983; Finn:1985,1987, for example). Yet here also there is a 'stand back in amazement' reaction; deep surprise that such a situation should pertain, incredulity that more importance is not attached to learned skills and qualifications - the output of the schools.^[3] Explanations are deeply implied and understated, but mainly ignored.

First, there is what might be called the Concern Theory. Simply stated, this is that in recent years employers have become more concerned with work attitudes as they have perceived a particularly sharp decline amongst youth recruits in this sphere. Thus, they place more emphasis on these in recruitment. This is reflected in their recruitment criteria. The concern theory has never been stated as openly as this, but it appears to guide the statements of certain commentators. For example, Finn (1987) quotes research carried out by the National Youth Employment Council in 1974 which argued that young peoples' work attitudes had changed; they were now more 'questioning' and less likely to unproblematically submit themselves to work discipline (Finn:1987,p.107). This fear of employers, that youth are more 'critical' (Blackman:1987) and less open to discipline than they used to be, has been noted by many others.^[4] Sarup (1982) argues that employers are more 'anxious' about work attitudes than numeracy and literacy.

The concern theory is conjunctural. It argues that since about the mid-1970s, employers showed particular concern about the work attitudes of youth, which they felt to be in decline. This concern showed itself in the studies on the needs of employers referred to above; work attitudes were the most important category of attributes sought. The importance of work attitudes in these studies is explained by the particular concern of employers for the work attitudes of youth since the mid-1970s.

The concern theory does not say that work attitudes are essentially more crucial than other classes of attributes, that they were important

independently of what employers believed at any particular time. It is just that from the mid-1970s employers are obsessed with them. Survey evidence gave the concern theory some support. Finn and Markall (1981b) found that employers in their survey perceived deterioration in young recruits (since 1975) to be most marked in the area of 'discipline and respect' (p.37). For the concern theory to attain explanatory power it would have to be shown that in periods when employers were not concerned with the work attitudes of school leavers that work attitudes are less important than other attributes. Going back in time it is doubtful that the statistical base exists for this, as research into employers' needs really took off with MSC (1978). We must wait for a time when employers are not concerned about work attitudes because they believe them to be in decline, and then assess the importance of various classes of attributes. If work attitudes are still most important, then the concern theory can be consigned to a marginal role, but if work attitudes are less important then the concern theory has real substance. If the concern theory is wrong, and the importance given to work attitudes rests on a firmer material base than just employers' perceptions that they have got worse, then the conditions for testing it will never arise. Furthermore, the concern theory may well play a part in explaining the particular importance of work attitudes in the last ten years through boosting the importance of work attitudes within their overall dominance, but yet fail to explain the latter.

As a general theory of the importance of work attitudes the concern theory requires more evidence. If management journals are examined, then a concern with work attitudes stretches back to at least the First World War.^[5] Schofield (1923) argued that since the First World War young people became more purposeful and 'critical', harder to recruit and more of a problem for the employer. Echoes of the contemporary debate. There was a perennial concern with work attitudes; although this evidence is impressionistic, based on the views of particular employers in two journals.

A second, less common explanation is that work attitudes are important because they are crucial to efficiency and productivity. Work attitudes are important because they pose the 'biggest hindrance to efficiency'

(Mitchell:1977). Allen, Evans, Freeman and Marshall (1978) have noted that some commentators on the British economy have concluded that attitudes to authority and work amongst British workers account for their lower productivity as compared with competitors.^[6] Roderick and Stephens (1978) have argued that the superior work attitudes fostered by the German education system in the nineteenth century helped the German economy to overtake Britain in the new industries of the late nineteenth century. These observations have not been assessed in terms of the importance of work attitudes in recruitment and have not been linked to the dominance of work attitudes in studies of what employers look for in young workers.^[7] Neither has it been shown or argued why work attitudes are more important for productivity than learned skills or qualifications. It remains an underdeveloped explanation.

A third view is that employers believe that they can remedy the basics, (deficiencies in numeracy and literacy), if young people are of sufficient intelligence, but they cannot remedy poor work attitudes (Jamieson:1985). Therefore they gave high importance to work attitudes in recruitment. This view is a reasonable starting point. But, why do employers believe they cannot remedy poor work attitudes? What does this belief rest on? These questions are avoided. Apart from these two views and the more common concern theory, there has been little attempt to explain the importance of work attitudes. The 'stand back in amazement' stance has prevailed.

The following section provides the concepts and distinctions which allow a general analysis of the importance of work attitudes. It also fulfils another function; these concepts and distinctions are used throughout the thesis for elucidation of the CEES.

(viii) Distinctions, Definitions, Specifications

The explanation of the importance of work attitudes cannot be given directly. It is essential to develop certain distinctions and insights gained by recent studies of labour power, the recruitment process and the labour process.^[8] Distinctions developed by myself, and not hitherto

included in the thesis are also required.

The criteria of recruitment, the standards according to which youth are assessed, selected and accepted for employment, have so far been identified as being attributes sought within applicants for apprenticeships. A glance at Appendix 7 shows this to be a misleading view. Some of the circumstantial elements, 'acceptable background' and 'parental interest' for example, appear to be attributes that do not reside within the applicant at all. They are not part of his being as a potential labourer in the same way that, say, all of the work attitudes are.

At this point a distinction between the criteria of recruitment, which include all the attributes in Appendix 7 (and other criteria not included there), attributes sought in applicants at the point of recruitment, and labour power attributes, would seem useful. The criteria of recruitment are all the factors which employers take into account, the standards they use, which determine which people are recruited. Attributes sought in applicants at the point of recruitment derive from the immediate conceptions of the agents of production, in this case the apprentice recruiters, about what they look for in young people. They form a class of the criteria of recruitment. Labour power attributes are based on the social significance of the dominant attributes sought at the point of recruitment, and this significance lies in the fact that most formally stated attributes, in essence, are organically related to the labour process. Labour power attributes pertain to skills, qualities and competences which are relevant to the performance of labour in the labour process. There are three perspectives on labour power attributes. They are first of all something within labour power, its constituent items, what labour power essentially consists of. Secondly, they can be and are socially produced within labour power to varying degrees. And thirdly, from another perspective, they are attributes that are sought in applicants in recruitment. Applicants are assessed and judged in terms of the development of specific labour power attributes within their labour power. Within the thesis discussion of these perspectives therefore changes depending on whether this discussion is about labour power itself, its social production or its assessment in recruitment.

In practice the extent to which recruiters of labour power frame the attributes sought in youth in terms of labour power attributes regulated by their labour process varies. But it would be irrational for recruiters to seek attributes in youth on mere whims or eccentric notions, with no reference to their labour processes. The needs of industry are essentially labour power needs.

Labour power attributes are firstly then the itemised constituents of labour power. They have a contingent relationship with the labour process because, although they are regulated by it, conditioned by it, they ultimately rest on the subjective assessment of the capitalist. Contradictions within the attributes of labour power, arising from the very nature of labour power itself, do not allow any scientific, ideal and absolute definitions of the required attributes. The needs of industry cannot be stated; there can be no ideal labour process, ideal labour power or labourers. Stating what attributes of labour power are required involves bringing in aspects of labour power that are in contradiction.

Thus, there is a further distinction; that between labour power attributes, and aspects of labour power, the essential features and characteristics of labour power in general. The contradictions within the latter are fundamental; they provide the substrata within which the labour power attributes exist, are produced, develop and change and are assessed in recruitment. Capitalists and managers have to grapple with these contradictions though they do not conceive of labour power. From the capitalists' perspective there are only better or worse combinations of labour power attributes to be socially produced within the total labour power at their disposal, depending partly on management control systems, the forms of the division of labour and co-operation in the labour process which are variable, whatever the technology used, and in the face of contradictions within labour power whose origins they do not perceive.

Labour power attributes are not coterminous with attributes sought in applicants in recruitment, much less recruitment criteria in general. There is variation in the extent to which the attributes sought (at) in recruitment

are essentially labour power attributes. This is to be expected; recruiters of youth labour do not look for labour power attributes as such. To ask employers what labour power attributes they look for would be as inappropriate as asking them how much surplus value they produced last week. Capitalists, (and their agents), do not know what they are paying for when they buy labour power (Sayer:1979,p.69). Likewise, they do not know precisely the nature of the entity they are assessing in recruitment. The next section examines one of the fundamental aspects of labour power and shows how it underpins the importance of work attitudes as labour power attributes and attributes sought in the applicant in recruitment.

(ix) Aspects of Labour Power: the Subjective Aspect - and Work Attitudes

Labour power is the subjective element in the labour process (Chapter Two). As Cressey and MacInnes (1980) put it, workers are the 'subjective force of production'(p.13). These authors rightly noted that Marx makes the human will a '...defining characteristic of all human use-value creating labour'(p.13) in his architect and bees passage, where Marx argued that what differentiated the worst of architects from the best of bees was that the architect conceives the product prior to production (Marx:1867,p.174), and human labour is guided purposively through keeping the initial conception in view. In the labour process, the labourer subordinates her/his will to producing the product 'in consonance'(ibid.) with the original conception.

Subjectivity is internal to the labour process (Manwaring and Wood:1985), and workers subjectivity cannot be abolished without abolishing labour power itself, (Cressey and MacInnes :1980). As Manwaring and Wood (1985) have noted, even unskilled workers require some knowledge to do their jobs; an absolute divorce between conception and execution along Taylorist lines is impossible (p.171).^[9] Mental activities cannot be removed from the labour process altogether (ibid.) The subjective aspect of labour power is built into Marx's definition of labour power, as noted in Chapter Two.^[10]

The will of the worker is crucial. Arthur (1980) argues that labour power is '...dynamic, self-differentiated and alive.'(p.101), and that it is not just

about attaining efficiency through technical change but about subordinating the will of the worker to capitalist production. The attributes, or the powers as Arthur calls them, that constitute the labourer's labour power:

'...can only be externalised if they are objectified in production, and this latter requires, not the exclusion of..[the labourer's]..will but the use of..[her/his]..powers, however grudgingly.' (Arthur:1980,p.12).

Insofar as the will of the labourer is subordinated to capital then it is incorporated within labour power itself as it expresses itself in production. This subordination is never complete as it requires continual reproduction. The withdrawal of 'good will' can be provoked if the demands on labour power are assessed as unreasonable by the labourer(s). As Gorz (1976b) notes, the capitalist cannot rely on the workers' willingness to work; ultimately labour power appears as the worker's own property over which he exercises control (Cressey and MacInnes :1980). Labour power is a commodity controlled by 'an independent and hostile will' (Friedmann: 1977b,p.78).

The subjective aspect of labour power was reflected in the attributes sought in recruitment in the CEES. Appendix 7 makes this point explicit. In the work attitudes section there is an emphasis on applicants being willing (to learn), wanting (to work, go to technical college, to work with hands, and so on) and interest (in engineering, the apprenticeship, the interview and so on). Fifteen of the 23 work attitudes relate to what the applicant wants/wills/is interested in/likes. However, the subjective aspect of labour power is more important than these fifteen attributes suggest. If these likes, wants and interests are not minimally met in the labour process and in the social production of labour power itself, from the labourer's point of view, this may generally negatively affect all work attitudes and the appearance of her/his character and personality too. The argument here is that the importance of the subjective aspect of labour power runs through all the work attitudes and personality traits, and may come to affect the ability to take in learned skills too as 'good will' is withdrawn, motivation falls and hostility increases. It appears at this point that work attitudes are more important than learned skills. The learning of the

latter depends on work attitudes, and these in turn are a result of the real effects of the subjective aspect of labour power within individuals. These points are fundamental in explaining the real importance of work attitudes.

From the employers' view, the subordination of the labourer's will, both in terms of the social production of her/his labour power, and production itself, is facilitated through her/his identification with these activities. It helps if the labourer would rather do the type of work s/he in fact does relative to other work, that s/he is interested in training and further education and learning in the labour process. Her/his likes, wants, interests then provide a base for the subordination of her/his will to the aims of production in the labour process and the social production of her/his labour power.

It is the subjective aspect of labour power that provides the first step in the explanation of the dominance of work attitudes in the CEES. The employer has to grapple with the wants, desires and interests of the worker, and the subordination of the will of the worker to her/his aims and commands is facilitated as identification with the work and its accoutrements (training, day release, apprenticeship), increases. The labourer's will is crucial in determining learning in the social production of labour; if young people 'don't wanna know', (in relation to training, further education and work itself), if they withdraw 'good will', then this affects their work attitudes overall, their capacity to learn, and relations with craftsmen and trainers trying to train them. The centrality of the subjective aspect of labour power is at the root of the importance of work attitudes.

The subjective aspect was particularly crucial in the CEES as it dealt with apprenticeships. As Liepmann (1960) notes, the recruitment of apprentices requires special attention:

'Since apprenticeship involves a contract of employment..[for a specified number of years].., all employers are aware of the special importance of finding suitable apprentices - special, that is, over and above the general importance of engaging good workers.' (p.69).

Employers are generally stuck with apprentices once indentures have been signed.^[11] Apprenticeship also involves a further raising of the quality of

labour power through further social production of labour power in practical education and training. Other things being equal, the greater the will of the apprentice is subordinated to this the sooner the apprentice becomes of real use in actual production and hence value creation. It makes the will less 'hostile' in Friedmann's (1977b) terminology. The greater the apprentice wants and likes her/his practical education and training, then once more, the better s/he will do, ceteris paribus. Chapter Eight shows that where the will of the apprentice is relatively lacking in its relation to practical education (further education) and training, then s/he is invariably characterised as 'not wanting to know'. The learner's will is crucial in learning anything. The greater the apprentice's will is subordinated to her/his work and training through a coincidence of her/his relative likes, wants and interests, then supervision is required less as s/he does not have to be 'kept at it' and this increases the quality of other key work attitudes, (such as 'staying power/can stick at a job', and 'conscientiousness'), in the CEES - (see Appendix 7). These considerations are the roots of the dominance of work attitudes. The dominance of work attitudes reflects the fundamental importance of the subjective aspect of labour power. The extent to which the labourer's will is incorporated within her/his labour power regulates the extent to which s/he willingly performs labour in the labour process. Concretely, unwillingness to labour in the labour process appears to the employer as a problem of work attitudes. Two other fundamental aspects of labour power, whilst not playing much of a role in the explanation of the importance of work attitudes, do figure in future discussions, and hence are appropriately described here.

Exchange Aspect and Use Value Aspect of Labour Power

These aspects can best be appreciated through a brief description of certain points in Cressey and MacInnes (1980). These theorists note a crucial distinction in Marx's work between the use value aspect of labour and the exchange value aspect of labour. The former pertains to the labour process, the production of useful things, and the latter to the valorization process,

the production of value and surplus value. The immediate process of production of commodities is the unity of the labour process and the valorisation process (Marx:1866,p.952; Marx:1867,p.181; Elson:1979,p.147; Rattansi:1982,pp136-137). The exchange value aspect of labour is related to what Marx called the real subordination of labour^[14], which aims to '...appropriate all subjective elements to keep valorisation as the sole object of the production process.' (Cressey and MacInnes:1980,p.7). The theory of the real subordination of labour grasps:

'...only the exchange-value aspect of the relationship..[of labour to capital]..Here indeed capital seeks to reduce the worker as far as possible to the status of commodities, enforcing the wage form and divorcing them from the means of production in order to maximise the alienation of surplus value and abolish all dependence on the workers' own skill and initiative, lest these frustrate the requirements of valorisation.' (ibid.p.14).

The use value aspect of the relation of capital to labour stands in contradiction to the exchange value aspect, as in the former:

'To develop the forces of production capital must seek to develop labour as a subjective force to unleash labour's powers of social productivity rather than abolish these powers.' (p.15).

These two contradictory relations of labour to capital ultimately yield contradictory labour control and labour process strategies, argue Cressey and MacInnes. At the extreme these strategies polarise into Friedmann's direct control and relative autonomy strategies (Friedmann:1977a,b).

The important point is that labour power itself reflects and provides the foundation for the contradiction between the use value and exchange value aspects of labour. In relation to the exchange value aspect, where valorization is to the fore, the subjective aspect of labour power through the will and consciousness of the labourer, ultimately defies the reduction of labour power to general commodity status, as just another factor in production. Labour power is a special and peculiar commodity, a class apart from other commodities, as it incorporates a will, a subjective force. In key respects it is unlike other commodities (Chapter Two). The will of the labourer, and hence her/his control over her/his own labour power, is never completely subsumed under the control of capital. If it was, then the

labourer would become an automaton.

The argument here is that there are also exchange and use value aspects of labour power itself. Insofar as there is an exchange aspect of labour power, it reflects the extent to which the exchange aspect of labour attains a social reality within the labour process, the extent to which labour power has been socially produced with the exchange aspect in view, and the extent to which this social production has raised the level of attributes of labour power pertaining to the exchange aspect. The same considerations regulate the social reality of the use value aspect of labour power. These aspects of labour power are in contradiction and they incorporate antithetical labour power attributes. These aspects of labour power are less fundamental than the subjective aspect. The extent of their existence within particular labour powers is more contingent on the factors outlined above.

It is being argued here that some attributes sought in applicants in recruitment mainly, (but not exclusively), reflect either the exchange aspect of labour power or the use value aspect. They are biased towards one or other of these aspects. It will be argued in the next chapter that some labour power attributes reflect both aspects. Attributes such as 'disciplined', and 'punctual/good timekeeper' reflect the exchange value aspect, whilst 'creative', 'inquisitive/asks questions', 'manual dexterity/good with hands' and 'intelligence' reflect the use value aspect. The former can be understood in terms of valorisation and the drive to expunge the creative attributes, the discretion and control of the worker in the labour process. These attributes reflect the antagonism of capital to labour thrown up by the exchange aspect of the relationship. The latter reflect the '...initiative, creativity and dexterity of the worker.' (Cressey and MacInnes :1980,p13), inherent in the use value aspect. As the exchange value and use value of labour are in contradiction, so the use and exchange value aspects of labour power and their corresponding attributes are also antithetical.

Contradictions, inconsistencies and confusions in expressions of employers' needs pointed to by theorists and commentators examined in Chapter One can

be partially explained by the fact that the exchange and use value aspects of labour power are reflected in labour power attributes. The latter reflect the contradictions of the former. This is one of the real roots of the contradictions in the 'needs of industry'. The following section elaborates the concept of labour power attributes and argues that they are dominant in attributes sought in applicants in recruitment.

(x) Labour Power Attributes

The nature of labour power attributes requires elaboration. It is not a term with wide usage. Labour power is the capacity to labour. This capacity is constituted by myriad qualities, competences, skills and physical and mental capabilities. Humans have all kinds of qualities, competences, skills and physical and mental capabilities - in short, attributes. What determines which of these become labour power attributes?

There is no clear demarcation within human beings between the labour power attributes and other attributes of the person. This demarcation becomes most severe in capitalism as the existence of labour power as separate from the person is fundamental to the way in which surplus labour-time is created and the surplus product appropriated. It is crucial to understanding capitalist exploitation as Marx (1867) shows. Certain attributes of the person only become attributes of labour power under definite social conditions and on certain considerations. In sum, labour power attributes are the competences, abilities, physical and other qualities relevant to the performance of labour in the labour process. There are three dimensions here.

First, there are attributes of the person which become actualised within the labour process itself. They are utilised in production. This has two elements: those attributes relating to the task, the immediate job itself; and those relating to the labour process as a whole - the division of labour, the forms of worker co-operation and management control, internal recruitment and retraining systems.^[13]

Secondly, there are the attributes of labour power that capital and its

agents deliberately attempt to socially produce - the attributes of labour power incorporated in labour power, and developed to varying levels of quality through the social production of labour power. These relate especially to the practical education and training elements in the social production of labour power. They are regulated by the attributes perceived to be relevant to the performance of labour in the labour process. There may be a gulf between this second and the first consideration; labour power may be over or underproduced in relation to the range of attributes relevant to the utilisation of labour power in production.^[14]

Thirdly, labour power attributes can be specified, defined and assessed by recruiters of labour power; the subjective dimension is even more in evidence here. Nevertheless, the specifications and definitions of the attributes sought in applicants for jobs are regulated, to varying degrees, by the specific job in question and the employer's perception of the skills involved, and the wider aspects of the labour process referred to in the first set of considerations outlined above. The relevant attributes here flow from the labour process, rather than being strictly determined by it, as they depend on the recruiter of labour power's judgement of what these relevant attributes are. Wood (1988) found that recruiters do not look for personality traits per se, but the personality traits they believe are linked to production.

There is room for difference between the specification of the attributes by the recruiter and the attributes actually utilised in production. Such difference is expected. Wood (1986) found a marked reluctance of employers amongst the personnel managers he studied to use job descriptions in recruitment. They tended to 'carry knowledge of jobs in their heads' (p.106).^[15] Approximation was in order. Labour power attributes are assessed as attributes within applicants for jobs, as attributes already socially produced, and as those which appear to be lacking and hence requiring social production. The **quality** of the specified attributes is also assessed. Recruiters do not think in terms of labour power attributes, but concretely in terms the sort of person they want and what they look for in applicants. Attributes sought in recruitment reflect these concerns. Yet in

defining and assessing attributes sought in youth in recruitment, employers are involved, to varying degrees, in the specification and assessment of labour power attributes. Furthermore, when the attributes sought in applicants by employers are examined, labour power attributes dominate.

(xi) Attributes Sought in Applicants in Recruitment

Appendix 7 shows that the attributes sought in applicants in recruitment in the CEES are dominated by labour power attributes. The work attitudes are all directly related to labour power attributes as characterised above. The personality traits are less easily identifiable as labour power attributes. Attributes 25,30,37 are not obviously labour power attributes. Only detailed examination of the references to these attributes could show this. Chapter Eight provides detailed analysis of some of the most important attributes in the CEES, but a detailed analysis of them all would be impossible. Thus, the argument that all personality traits in the CEES essentially refer to labour power attributes must remain a hypothesis. It is my contention that all the social attitudes, with the possible exception of No.44 in Appendix 7 are basically labour power attributes. Learned skills clearly are; the cognitive skills relevant to training, further education or work itself. All of the general abilities clearly relate to either work, training or further education. Qualifications are a guide to learned skills; they are not attributes of the applicant as such. They are not attributes of labour power but indicators of the degree to which labour power attributes are present. Thus, they are not strictly attributes at all, and can be disregarded; this point is developed in Chapter Nine. What this shows is that CEES employers made no distinction between attributes sought in applicants and their indicators. Physical qualities are clearly labour power attributes, attributes relevant to work in the labour process. But circumstantial elements appear to have little to do with labour power attributes. However, as Chapter Eight will show in relation to appearance and Chapter Thirteen in relation to social and leisure activities, these are like qualifications, not attributes, but gauges and guides to other attributes which are classed

as labour power attributes. Circumstantial elements such as 'parental interest' are clearly not attributes of the applicant as such. In sum, the attributes listed as labour power attributes dominate the attributes sought in applicants in recruitment.

(xii) Criteria of Recruitment

What this points to is that the attributes sought in the applicant in recruitment are just a class of the criteria of recruitment. Chapter Eleven and Part Four look at some recruitment criteria other than attributes sought in applicants in recruitment. The criteria of recruitment are very broad; they are the sum of all the underlying principles involved in judging and differentiating between applicants in recruitment. The attributes sought in applicants in recruitment are a class of the criteria of recruitment. Labour power attributes are the dominant class of the attributes sought at the point of recruitment. Finally, labour power attributes move within the fundamental aspects of labour power. The latter are the central features of labour power itself. Thus, these distinctions and definitions flow from labour power down to the most concrete level, the criteria of recruitment. Figure 23.1 summarises these points.

The final section returns to the question of the dominance of work attitudes and personality traits. This second explanation is relatively independent of the distinctions and concepts elaborated above.

(xiii) Underdevelopment in the Social Production of Labour Power

This provides the second main explanation of the importance of work attitudes. Certain commentators and theorists have noted that schooling either fails to instil the work attitudes and also personality traits demanded by employers (Hickox:1982; Blackledge and Hunt:1985), or schools pay insufficient attention to these (Watts:1985b), though employers, parents, teachers and pupils believe they are important. What this reveals is the underdevelopment of the social production of work attitudes and

personality traits as labour power attributes.

Schools play a part in the formation of general work attitudes and character (Apple:1979). But from the employers' perspective it is work attitudes and personality traits relevant to further social production of labour power (in training programmes, further education), and the labour process itself, that are important. Schools are not overtly geared to this. Chapter Two noted that they are involved in much more than the social production of labour power. Frith (1978b,1980b) notes that teachers are generally averse to seeing themselves as servants of industry, and Government and employer rhetoric on instilling work attitudes and developing character for industry and commerce invariably falls before teacher autonomy.

Character training schemes, and residential courses as part of the training of young people and apprentices financed and sometimes run by firms after recruitment, are a desperate attempt to remedy this underdevelopment. The relative lack of attention given to work attitudes and personality traits expresses itself in a general concern with these. Thus, the concern theory outlined earlier is misleading; employers have always been concerned with work attitudes and personality traits as these are underdeveloped in the social production of labour power up to the point of recruitment.

But this underdevelopment is not just a result of the failure of the schools to undertake the required work. The social production of attributes such as work attitudes and personality traits is more complex and difficult than developing learned skills. The latter can be forced to an extent, against the will of the learner. The former is involved with changing the subjectivity and consciousness of the learner itself; a much subtler and complex process. Ultimately this involves the contradiction pointed out in Chapter Two; the attempt to objectify subjectivity, to fix into consciousness certain attributes of labour power. It is this contradiction which makes investment in the social production of work attitudes and personality traits as labour power attributes so risky.[16]

(xiv) Summary and Discussion

This chapter addressed the question of what CEES employers looked for in applicants. Work attitudes dominated. Two explanations of this were presented. The first rested on the nature of labour power. It was argued that the subjective aspect of labour incorporates the will of the worker to varying degrees. The greater the will of the worker is incorporated in labour power then the less recalcitrant it becomes and it incorporates the objectives of capital. Key work attitudes sought in applicants in recruitment reflect this situation. The second explanation rested on the underdevelopment of the social production of labour power up to the point of recruitment. Schools are not geared to socially producing work attitudes as labour power attributes. This is the real basis of employers' concern with work attitudes, and also personality traits.

It was also argued that the contradictions within labour power, which are basically contradictions between aspects of labour power, are reflected in labour power attributes and in attributes sought in applicants in recruitment. Employers are forced to define and conceive of their needs in a contradictory way. Statements of needs, lists of attributes sought in applicants, reflect contradictions within labour power. Even where there are no obvious contradictions within such statements, these emerge once the entity these statements refer to is analysed - labour power. Contradictions within labour power exist independently of the coherence of employers' needs statements. The most succinct, clear and pertinent statement of needs could not alter this, and analysis of this expert statement, using the approach developed here, would ultimately expose the inherent contradictions.

Chapter Seven takes up arguments from Chapter One. It specifies where the CEES stands in relation to individual capitals and the engineering sector of capital. Furthermore, given the conceptual development within the thesis, it is possible to give a critique of the concept 'needs of industry'. The first step in this critique is to argue that the needs of industry are basically labour power needs. The next step is to show that the concept of needs in relation to labour power violates the nature of labour power.

Chapter SevenINDIVIDUAL CAPITALS, THE ENGINEERING SECTOR OF CAPITAL AND THE CRITIQUE OF THE NEEDS OF INDUSTRY PERSPECTIVE(i) Introduction

In Chapter One it was argued that when analysts examine the needs of industry they typically fail to specify the category of capital which the needs relate to. Such a specification is undertaken here in relation to the CEES research in the next section. It is argued that the research takes place at the level of individual capital in engineering.

Section (iii) argues that, despite some attributes listed in Appendix 7 suggesting otherwise, the CEES is not about ascertaining the attributes sought in applicants for the engineering sector as a whole. This section then describes what research into these would involve. Section (iv) gives the final step in the critique of the notion of the needs of industry and builds on the criticisms within the literature which were examined in Chapter One. It was decided to reserve this critique for this chapter as it can proceed in the light of the theoretical and conceptual development of Chapters Two and Six. It is argued that the notion of the needs of industry is incoherent. This is because these needs cannot be specified in terms of the quality of labour power attributes to be socially produced or assessed in recruitment. Such a specification entails the notion of ideal labour power, an incoherent concept. Secondly, the exchange value and use value aspects of labour power are in contradiction. This contradiction cannot be abolished without abolishing labour power. As the attainment of ideal labour power would involve the resolution of this contradiction it rests on a fantasy. The needs of industry can never be met.

(ii) Individual Capitals

The empirical analysis of Part Two focusses on labour power attributes and the attributes sought in applicants in recruitment from the perspective of

individual, competing capitals. The more general theory and analysis, on the social production of labour power, aspects of labour power and the essence of labour power, operates at the level of capital in general. In each case the relations between the general categories and analysis and the concrete, observable forms and phenomena of the empirical analysis is brought out. For example, Chapter Six shows that the contradictions between the subjective, exchange and use value aspects of labour power, (which were initially theorised at the level of capital in general), have consequences in terms of the labour power attributes and the more immediately concrete attributes sought in applicants in recruitment; the latter reflect the fundamental contradictions in the former.^[1] Chapter Six shows how the fundamental contradictions resulting from the nature of labour power and its social production work themselves out, and are manifested in concrete individual capitals. The concrete analysis rests on individual capitals within a particular sector of capital; the engineering industry.

The analysis of individual, many capitals:

'...relates to the concrete forms which arise out of the movement of capital. It considers relationship between individual capitalists, the relationship of one capitalist to another, that is, competition.'
(Richards:1979,p.9).

Competition is '...the interaction of different individual capitals.', and '...the medium through which the laws of capitalist production work themselves out.'(Richards:1987,p.110). Thus, in the CEES, where concrete individual capitals are examined, it must be stressed that the employers were in competition within the engineering sector of capital at the level of the labour market. They were also in competition with capitals in other sectors. Apprentice recruitment reflects this; the recruiters viewed the attributes sought in applicants through the narrow focus of their own capitals. CEES employers were aware that they were in competition in terms of getting the best applicants. Smaller firms bemoaned the fact that they could not offer canteen facilities, sports clubs, pension schemes, clear promotion structures and the status and glamour of the larger firms to attract the better applicants, the applicants whose labour power was

qualitatively superior as far as it had been socially produced up to the point of recruitment.

The CEES employers defined, specified and assessed the attributes sought in applicants in relation to their own capitals, especially their own labour processes. These attributes were basically labour power attributes. The needs of the firm came first. Mueller and Neussuss (1978) note that:

'The most important relationship, the one that determines the real behaviour of capital, is the relationship of the individual capital to its source of surplus value, the workers it exploits.' (pp36-37).

This holds in recruitment too. Recruiters aim to gain a competitive edge through recruiting the best possible labourers, in this case apprentices, future craftsmen and technicians. The recruitment process is an opportunity to take a step towards raising the average quality of labour power - both in relation to the individual capital concerned, and the social average for the trade or sector of capital. The recruitment process is not part of the social production of labour power. It belongs to the labour market, the sale and purchase of labour power. Its importance lies in the fact that it is here that the recruiters of labour are forced into thinking about labour power attributes relevant to their labour processes. As Marx noted of the capitalist:

'With the keen eye of an expert, he has selected the means of production and the kind of labour power best suited to his particular trade...' (1867,p.179).

Here Marx is referring to labour power already socially produced and on the labour market. But the keen eye is also required in the selection of labour power still in the grips of social production. This takes place from the perspective of individual, competing capitals.

(iii) The Engineering Sector of Capital

If Table 6.4 in Chapter Six is examined, it might be surmised that the three sets of columns show: first, the attributes sought in recruitment for the whole engineering sector for craft apprenticeships; secondly, the same, but

for technician apprenticeships; and thirdly, the same, but for engineering apprenticeships in general. This would be mistaken. The CEES examined the attributes sought by individual capitals. Thus, the results refer to individual capitals, and Table 6.4 is a summation of this. It does not constitute the attributes sought by the engineering sector.

Leaving aside the fact that the CEES sample under-represents foundry and over-represents toolmaking and machine tool firms, let us assume that the results in Table 6.4 do pertain to the engineering sector as a whole. Work attitudes are dominant; but which work attitudes? Table 6.4 tells us nothing. This question can only be answered by examining the particular work attitudes in Appendix 7. These, taken as a whole, do not refer to the engineering sector, but are a summation of attributes sought by individual firms. The effectivity of these attributes only operates at the level of individual capitals. They only take on social meaning in relation to the particular individual engineering capital specifying and referring to them. The assumption that Table 6.4 represents attributes sought for the engineering sector as a whole rests on a forced empiricism; the driving of data into categories outside its initial social location.

A sceptic might look at the attributes listed in Appendix 7 and argue that attributes such as interest in engineering appear to pertain to the engineering sector. Attributes such as good attitude to work/wants to work sound as if they refer to working in any industry. Employers referring to such attributes are either altruistic, as they appear to be framing the attributes they seek and aim to socially produce in terms of the industry as a whole or industry in general, or they are irrational. The retort is that references to these attributes only take on concrete meaning if they are related to the particular capital from which they originated. For the employer, a good attitude to work only takes on social reality, exists and manifests itself, if it is exercised in relation to his capital, in his specific labour process. A youth may have good work attitudes in general but not in relation to the capital they enter. This is no use to the employer. Even general-sounding attributes ultimately relate to the particular capital that referred to them and not the sector, or capital in general.^[2] This

argument can only be demonstrated through an ultra-detailed analysis of particular attributes, and this is one of the aims of the following Chapter Eight. But, what would research into the labour power attributes and their social production in relation to particular sectors of capital actually involve? Sectors of capital correspond to what Marx calls branches or spheres of production (1865a,p.208) - particular industries; for example, the cotton industry, the engineering industry, the plastics industry within industrial capital. Thus,

'...labour power assumes a distinctive form in every particular sphere of production, as a capacity for spinning, cobbling, metal-working, etc, so that every sphere of production requires a capacity for labour that is developed in a specific direction, a distinctive capacity for labour...' (Marx:1866,p.1013)

The social production of labour power in relation to sectors of capital includes four different aspects. First, there is the production of labour power with attributes relevant to its utilisation across the whole sector; in more conventional terms, skills are developed which pertain to the whole sector.^[3] The limit to which this can occur depends on there being similarities between labour processes across a sector of capital. The actual extent to which it occurs depends on this limit and also on the organisation of the social production of labour power within a specific sector and the antagonism of individual capitals to this enterprise where it is perceived by employers that the labour power attributes to be socially produced do not correspond with those deemed relevant to their labour processes.

Secondly, within particular sectors there may be sub-sectors which have a distinct form of the production of labour power. For example, in the engineering industry, sheet metalworking (a distinct trade), may become the basis on which labour power is socially produced. Thirdly, the social production of labour power may proceed on the basis of the sector as a whole from the perspective of the labour market. Thus, there may be attempts to produce labour power which is flexible and adaptable in the sense that it can enter particular sub-sectors. For example, in the engineering industry there is some provision in the training of apprentices such that they attain a grounding in more than one sub-sector. Thus, in the first year off-

the-job training, sheet metalwork apprentices may also be partially trained in welding and fabrication. There is here an attempt to get away from specialisation; multi-skilling it is called by those involved in apprentice training. The extent to which this happens is determined by a number of factors which we need not go into here. But its ultimate development would mean that any worker would be able to move in and out of different sub-sectors. From this perspective the social production of labour power facilitates the working of the labour market within the particular sector, lessening skill shortages through making labour power more flexible and adaptable, both directly (through producing labour power capable of working within specific sub-sectors) and indirectly, (by providing a foundation on which retraining can take place in another sub-sector).[4] Finally, the production of labour power proceeds on the basis of attempting to produce specific work attitudes in relation to sectors and sub-sectors of capital. These are work attitudes specific to the engineering sector and sub-sectors.

(iv) Critique of the Needs of Industry Perspective

In Chapter Three it was noted that when the fieldwork studies were commenced the research was oriented towards a needs of industry perspective. This view assumes that what employers say they require of young people appears capable of fulfilment in principle. Employers do not ask for the logically impossible. Research into employers' needs is research into their rational demands; whether schooling and training systems are capable of meeting these in practice is another matter. But the needs of industry are not capable of being met in principle; they founder on the contradictions within labour power pointed out in Chapters Two and Six.

The language of needs and requirements introduces a functionalism into the debate which gives the illusion of the possibility of these being met. Those few who have given critiques of what is meant by 'needs of industry' continue to use 'needs' vocabulary. Finn, who analysed the concept of the needs of industry in a number of works in the late 1970s and early 1980s (Finn:1978,1979,1982), was still using needs vocabulary in his (1987).

Commentators have justifiably taken Marxist writers in the sociology of education to task for indulging in functionalist explanations (Sarup:1978,1982; Finch:1984; Brown:1987a). It was previously argued (Chapter Six) that the 'needs of industry', as used in the literature, basically refers to labour power needs. This is the first step in understanding the incoherence of the concept. The second step in combatting the needs of industry perspective and the functionalism it entails is to undercut the notion of 'needs' in this context.

Goldstein (1984) attempts to do this through arguing that the approach to the needs of industry that the New Training Initiative is based on is flawed. She argues that different companies have different types of labour needs at different times. Employers can only articulate their needs a posteriori. Competition generates 'diverse labour requirements'(p.101), she argues, and it is impossible for employers to define and verify competences and capabilities required for different jobs. However, she fails to say why this is so, but merely notes that employers buy the means of production and discover what types of labour are required by trial and error.

This account leaves too much unexplained whilst still ultimately embracing a needs of industry perspective. It has to be explained why employers cannot frame their needs prior to taking on labour. But the main objection is that her account implies that what employers state as their needs, (albeit after the event), ultimately makes sense. For Goldstein, the problem is that they are defined too late, after expensive experimentation with different types of labour. But they can be, and are, articulated, and in principle can be met. In practice they are not likely to be as the social production of attributes of labour power is subject to the competitive struggle of individual capitals asserting their needs as against others, hence no overall rational social production of labour power can proceed. This is the problem that the MSC faces. But this account is just a more sophisticated version of the objection put forward by others that the needs of industry can be stated but might not be met (Willis:1977; Sarup:1982; Apple:1985).

There is a deeper objection; talk about the needs of industry ultimately

makes no sense as their specification flies in the face of capitalist reality. In principle they cannot be met, not just in practice. All talk of them being met is senseless. It is this point which must be shown. Obviously, employers do define their needs, and the next chapter will give examples of them doing so. What this amounts to is the specification of the attributes of labour power. The social production of labour power rests on this specification, however accurate and thorough the latter is. This, in principle, can be done and is done. The crucial question is this; does this specification amount to a characterisation of employers' labour power needs? The answer below is negative; such a specification is **only** a specification of labour power attributes, and nothing more, and this alone cannot be what employers ultimately need. The language of needs is ultimately redundant and misleading, and getting rid of it ends reformist illusions that the state or the MSC can meet industry's needs and also banishes functionalist accounts from one area of Marxism.

Despite the excellent work of Fim (1978,1979,1982,1985,1987), he did not ask the crucial question about the needs of industry; what does 'needs' mean in this context? His critique of employers' needs concentrated on the ambiguities, confusions and inconsistencies in statements of needs. This critique moved within employers' conceptions of their own needs.^[5] Mitchell (1977), a training board officer, and Johnson (1977), an MSC official, asked deeper questions. Mitchell (1977) asked the question: 'What are Needs of Industry?'. His answer was that these needs involved firms becoming more efficient, increasing their profitability and competitiveness. However, people become efficient when:

'...most of the individuals involved, whatever their status and roles, perform their different tasks with skill, pride and enjoyment, and with a sense of shared identity and purpose.' (Mitchell:1977,p.2).

This formulation illustrates contradictions between the exchange, use value and subjective aspects of labour power in a virulent form. In the drive for efficiency and competitiveness the exchange aspect of labour power is to the fore, and labour power attributes such as speed, discipline, accuracy and other attributes which cut necessary labour time are at a premium.^[6] Yet,

Mitchell aims to reconcile this with workers performing their tasks with skill, pride and joy, which reflect the use value aspect of labour power. These are in contradiction; the creative elements of the use value aspect run up against the drive to expunge these through adherence to the exchange aspect (to enhance speed, accuracy, work discipline). He also expects the worker to subsume his will within his labour power through identification with the exchange aspect of labour so that the subjective aspect of his labour power loses its capacity for recalcitrance and hostility. Mitchell describes the dream worker, where the contradictions of labour power are somehow resolved. Johnson's (1977) formulation does not start with a fantasy but ends with one.

Johnson (1977) argues that the needs of an industrial organisation equal the difference between the attitudes, knowledge and skills that a worker requires for a particular job and the attitudes, knowledge and skills that he possesses. Meeting these needs requires eradicating this difference, this gap; this is the function of training. In this account the needs of industry equal the difference between the skills, knowledge and attitudes required for a job and those the worker has. Needs are the gap between the ideal worker, (who possesses all the skills, and so on for the job), and the real worker who is lacking some of these. In meeting the needs of industry we are back to Mitchell's ideal worker. Sociologists have also used a similar conception of the needs of industry to Johnson. Sarup (1982) argued that the needs of industry not being met could be defined in terms of a mismatch between the skills the worker required and those he had, and in an earlier work (Sarup:1978) he argued that schools were involved in producing the ideal worker. Apple (1985) argued that the correspondence between education and industry was established when ideal workers were produced.

Others have pointed out that employers in fact operate with the image of the ideal worker. The Education Group (1981) point to the fact that this image of the ideal worker has changed with developments in capitalism, from the 'self-respecting mechanic' of the mid-nineteenth century to the 'modern subjects of the MSC' (p.19). Capitalism has always had to put up with the distance between the ideal and the real worker (ibid.p.23). Cohen (1984)

defines the new vocationalism in terms of the drive to produce the new model worker, whilst Finn (1986) argues that the YTS is about remaking the working class according to capitalist ideals. Others (Blackburn and Mann:1979; Wood:1986,1988) argue that employers operate with the notion of the ideal worker against which they measure applicants in recruitment.

Theorists arguing against the notion of the ideal worker tend to concentrate on criticisms to the effect that the ideal will never be reached (Willis:1983; Apple:1985), either because the school counter culture acts against the formation of the ideal worker (Willis:1977,1983), or teachers either do not set out to create the potential ideal young worker (Frith:1978b), or they may even set out to create the antithetical 'critical worker' (Chitty:1986), or are caught in the contradiction of creating the ideal citizen - who is critical, informed, and caring - and the ideal worker (Clarke and Willis:1984). Willis (1984) notes the political advantage of conceptions of the ideal worker; young people can be blamed if they fail to reach the utopian standards set by the demands of capital. These arguments show ideal young workers will never be produced; they do not criticise the notion head on. Clarke and Willis (1984) argue that they 'do not want these ideal connotations' of the citizen and the worker (p.10), and that they are 'not interested in these abstract generalisations, but the experience, expectations of culturally diverse youth.' (ibid.pp10-11). This ostrich-like approach yields everything to the employers, the Government and the MSC who use such abstractions to drag in schemes to attempt to ensure that education and training move further into meeting the needs of industry, making real young people into ideal young workers.^[7] To abandon analysis of the needs of industry and conceptions of the ideal worker leaves the field open to these conceptions, however distasteful they sound.

There are no ready-made critiques of the needs of industry and conceptions of the ideal worker. But the necessary materials do exist for a critique to be constructed. The Education Group (1981) rightly point out that the debates over whether schools are meeting industry's needs over the years are debates about the quality and quantity of labour power. It is the former that is crucial. Finn (1982) argues that debates about the needs of industry

reveal a continuous concern with 'the quality of labour power'(p.42). Arguments about 'needs' are about worker quality (ibid.). This is the case from the point of view of individual capitals especially; employers in competition are concerned about worker quality (Blackburn and Mann:1979). Labour power above the social average for the trade or branch of industry gives a competitive edge, ceteris paribus. In Blackburn and Mann (1979), employers in Peterborough were interested in distinguishing between 'better' and 'worse' workers in terms of particular attributes in recruitment. Hussain (1976) is correct in arguing that recruitment is basically about the differentiation of applicants.

This differentiation takes place through the attributes sought in applicants at the point of recruitment, and, it was argued earlier, these are dominated by labour power attributes. But a statement of the attributes sought in recruitment is not a statement of needs. From the point of view of the recruitment of workers the following are important. First, these attributes have a relative aspect. Applicants that are assessed in relation to them possess these attributes to a greater or lesser extent. Secondly, employers will want to raise the quality of their labour power by finding applicants in recruitment who have these attributes to a higher degree than workers they already employ, and insofar as they are taking on youth they will take applicants who have the specified attributes most fully developed, as this will cut costs in the social production of labour power. Thirdly, from the perspective of many competing capitals, the judicious employer will search for applicants who possess the specified attributes at least to the social average for the trade of branch of industry, and if possible, above the social average to gain a competitive edge. From the point of the social production of labour power, the employer can expend capital through taking on training staff and setting up a training organisation in the attempt to raise specified labour power attributes at least to the social average. Statements of 'needs' are lists of either labour power attributes against which employers assess the quality of applicants in recruitment on each item, or labour power attributes to be socially produced. From these considerations, what becomes of employers' needs and the ideal young worker?

What the employer ultimately wants is ideal labour power in terms of the specified attributes. In terms of the quality of labour power an ideal is nonsense. Quality can always, in principle, be raised. But labour power and its attributes are essentially fluid and indefinite. Thus, the ideal cannot be stated. Trying to pin down ideal labour power would be just as impossible as pinning down the limits to the hundred metres world record; it is always capable of being broken.

A simple example should illustrate this. If an employer specifies 'manual dexterity' as an attribute to be sought in applicants in recruitment or socially produced, then this is merely pointing to an attribute not to a need. First, from the perspective of recruitment. Say the employer gives two workers a manual dexterity test involving undoing some nuts and bolts. Worker (A) completes the test in 55 seconds and worker (B) in 34 seconds. This suggests that worker (B)'s manual dexterity is of a qualitatively higher level and that in the labour process necessary labour time will be saved in tasks involving manual dexterity, thus increasing surplus value relative to employing worker (A) on this particular attribute. But there can be no ideal here and hence no ultimate needs. The employer does not know and cannot specify the upper time limits to the test or to tasks involving manual dexterity in the labour process. If there were such limits, only those workers who reached them would be ideal workers in relation to this single attribute, and only then would the employer's needs be fulfilled on this one attribute. The language of needs and ideals is inappropriate in relation to labour power attributes. Employers are interested in the quality of the attributes specified; this cannot be bounded, and the notion of an ideal is logically incoherent, which in turn makes the notion of a labour power need being fulfilled an absurdity. The language of the needs of industry and ideal workers is not only misleading and static, but yields an illusion that these can actually exist. Thus, Clarke and Willis (1984) were right to argue that these notions rested on illusions, but these phantoms need to be exorcised not ignored. The fact that a learned skill was involved in the example given above alters nothing. Work attitudes can also be specified labour power attributes whose quality varies. Measurement of this

quality is more hazardous. CEES employers were very concerned about the extent to which applicants had an interest in engineering, for example.

Secondly, the same considerations also come into play in relation to the social production of labour power. It is the quality of labour power attributes that is really crucial; raising them above the social average. But the limit to this process cannot be specified. There is no ideal, and no coherent notion of needs being met here either. The limits to the social production of labour power are social, not biological or technical. They are set by contradictions within this process itself and the contradictions within labour power, considerations that do not concern us here.

This technical argument is supported by a more general social one. Going back to our example, worker (B)'s manual dexterity has both an exchange and use value aspect. From the point of view of valorization the speed of her/his hand movements and manual work is crucial. From the point of the use value it is the creativity and quality of her/his work that is manifested. The capitalist wants both the speediest expenditure of his manual dexterity attribute allied with maximum regard to quality. For the labourer this expresses itself in a contradiction between the creative and qualitative use of manual dexterity and its fastest and quantitative use. The contradiction is incorporated in her/his labour power through the development of abilities in production. Ideal labour power can never exist as this would involve the absolute resolution of this contradiction. This resolution is what is ultimately 'needed' by capital. As the exchange and use value aspects of labour are inherent to the labour process (Cressey and MacInness:1980), labour power will reflect the contradiction between these. What capital ultimately 'needs' is unattainable. Factors such as payment systems, control strategies and managerial policies bring about a partial practical resolution, but whatever these are the contradiction remains immanent and inherent. This analysis modifies that of the previous chapter. There it was argued that attributes sought in recruitment reflect the contradictions between aspects of labour power. Here, it is argued that the contradiction between the use value and exchange value aspects of labour power exists in

relation to a single labour power attribute.

Breaking away from the language of needs and ideal workers is not easy. Sarup, who criticised the neo-functionalism of Bowles and Gintis (1976) in his (1978), lapsed into similar language in his (1982). In Chapters Two, Six and Seven an alternative set of abstractions, processes and perspectives has been developed which attempts to break from the spell of functionalism, with its reformist implications and its stifling effect on theory. From now on, the thesis moves completely within the orbit of a concern with aspects of labour power, labour power attributes, attributes sought in applicants, the broader criteria of recruitment and the social production of labour power.

The next chapter illustrates the point raised in Section (ii), that the CEES employers defined the attributes sought in recruitment from the perspective of their own capitals and their own labour processes. It is argued that this is generally so even when they specified general attributes which appeared to relate to the engineering sector as a whole, or even the expenditure of labour power in any industry.

Chapter EightA DETAILED ANALYSIS OF SOME ATTRIBUTES SOUGHT IN APPLICANTS FOR ENGINEERING APPRENTICESHIPS(i) Introduction

This chapter compliments Chapter Six. The latter was a general analysis of the most important attributes and the attributes aggregated into broad classes. This chapter provides a detailed analysis, (bringing in qualitative data for the first time), of a few of the most important attributes. Qualifications are discussed in Chapter Nine. Appearance, good attitude to work/wants to work, interest in engineering and the job/trade and ability to mix/fit in, are here analysed in micro-detail. This analysis shows the complexity of the shifts in meaning, definitions and perceived relations between attributes utilised by employers. Of course, this reflected the actual situation in the labour process, where labour power attributes were interacting in fact, not just in the consciousnesses of recruiters.

The analysis takes up themes, issues and findings resulting from Chapters Six and Seven. On appearance, it is argued that CEES employers used it as a measure of work attitudes. However, there were some situations, such as where applicants came from poor families, where they used it with circumspection. Connections between appearance and personality were also made by CEES employers; applicants who chose to dress outrageously had a suspect personality. Schools and teachers, and to a lesser extent youth themselves were blamed for poor appearance at interview. The qualitative data on appearance, supporting Table 6.5 (but running counter to Tables 6.1/4), suggested that appearance was more important for technicians. Higher standards were set.

Section (iii) brings in other research in Coventry which illustrated the importance of work attitudes. The public debate on work attitudes of youth in Coventry was extensive. The CDEEA, the LEA, some teachers and careers officers, the 'Coventry Evening Telegraph': all these highlighted the poor

work attitudes of the City's youth. Only the Coventry Workshop and 'Jobhunter', a paper for young jobseekers, spoke consistently against these views. It is possible that this extensive public debate affected the perceptions of CEES employers regarding the work attitudes of youth. Yet Buckley (1977) reported that Coventry employers were generally satisfied with the work attitudes of apprentices. Survey research in Coventry gave little evidence to show that employers believed work attitudes had worsened. This calls the Concern Theory of Chapter Six into question, at least in the Coventry context. But CEES employers were arguing that work attitudes were not good enough, in absolute terms. Youth, schools and teachers were blamed for poor work attitudes.

In section (iv) it is shown that the levels at which firms sought an interest in applicants (in life/work/industry/engineering/trade/job), varied. Whether applicants displayed the appropriate level could determine their employment chances. On interest in engineering specifically, it is shown, in reply to Chapter Seven, that employers were not defining the attributes sought in applicants in terms of the engineering sector of capital. Even on this attribute they kept their own labour process, their own interests, in view. An interest in engineering, or in anything, could be channelled and concretised into the capital and the labour process in question. General interests could become specific. There were also specific reasons why a general level of interest in engineering was sought; the final destination of the applicant was not clear, (hence fixed ideas on trade were out), or it enabled the apprentice to be moved about during training and provided flexibility in final destination.

The final section argues that ability to mix/fit in reflects the use value aspect of labour power, especially its creative elements. It notes different definitions and ways of fitting in identified by employers, the dangers of fitting in too well, and the problems of not fitting in. Appearance in the interview could also indicate the quality of this attribute too. Like work attitudes, there was a vibrant public debate on this attribute in Coventry. It seemed to be a matter of commonsense to most local commentators, but given the various definitions used by CEES employers it became clear that it

was a complicated affair. Those perceived to be lacking in the ability to mix and fit in were seen as being disruptive to the social cohesion of the workforce through upsetting morale, which ultimately affected the co-operative powers of the workforce and then production.

(ii) APPEARANCE

'Young peoples' lack of motivation had left many of them inarticulate, untidy and unable to concentrate.' Director of Education, Coventry, (CET:22/6/1977)]^[1]

The connection that the City's Director of Education made between motivation and untidiness in 1977 is a key to an understanding of why appearance was so important for CEES employers. They were not generally looking for appearance per se. This would have been absurd in relation to craft apprentices, for the recruits would end up wearing overalls and sometimes be working in quite dirty conditions. Why then, was appearance so important?

With one exception (Ashton and Maguire:1980b), the literature was not helpful on this point. Researchers and commentators pointed to the importance of appearance in recruitment to youth jobs (Carter:1962; Schools Council:1966; Elles Report:1974; Keil and Newton:1980; Frith:1980a; Finn:1987). Jenkins' (1983) study of employers in the West Midlands found that 64% looked for appearance and manner in recruitment, whilst research for the Elles Report (1974) found that 57% of employers specified 'smart appearance'. Explanation of this importance was not to the fore.

Ashton and Maguire (1980b) noted that in the recruitment of young workers:

'...a concern with appearance and punctual attendance at the interview are often taken as an indication of eagerness for the job.' (p.153).

CEES employers made a connection between a young person's appearance at interview and their eagerness for the job. Appearance indicated and measured key labour power attributes; work attitudes especially:

'Er,..I like a kid t'be 'im t'look presentable. That's important t'me 'cos if 'a think a lad looks...er,..neat and tidy, then that usually epitomizes 'is attitude towards 'is job.'[F. Cross & Sons :Research

Notes].

For F. Cross & Sons, appearance was a measure of work attitudes. Other research carried out amongst Coventry employers has also noted the connection between appearance at the interview and attitude to the job.[2]

Yet CEES employers did not always simply read off an applicant's attitude to work from appearance at the interview. Sensitive employers recognised circumstances where appearance might be an inadequate guide to an applicant's attitude to work. They might come from poor families. Where other evidence, (school reports, examination results, doing part-time jobs) suggested that the applicant was likely to work hard appearance might become less important in cases where applicants came from poor backgrounds. For others, even those from poor backgrounds were expected to make efforts regarding appearance as:

'In personal appearance, it's quite important, not that they have the best clothes, but that they do make the best of what they have. Because the children themselves might come from a poor background you see.' [D. & L. Patterns: Research Notes, employer's emphasis].

Making the best of what they have got involved coming to the interview in clean clothes especially. As Hills Gears noted:

'I like them to look clean when they come lookin' for a job; not as though they've just come off a dust cart.' [Research Notes].

Even applicants from poor background could come in clean clothes. Failure to do so showed a suspect attitude, of not really wanting the job, or work.

Patternmaking shops emphasised the link between cleanliness at the interview and job performance. Church (Patternmakers) Ltd. liked to see someone in clean clothes at the interview otherwise 'their work will be dirty' and unacceptable. Applicants had to look as if they cared about their appearance. Ashton and Maguire (1980b) noted that some employers focussed on whether applicants seemed to have cared about their appearance in the interview, within the mode of dress adopted by young people themselves.[3] If an applicant did not seem to care about their appearance a few CEES employers overlooked it, even though they disliked it. They saw it as the

fault of schools or parents, not applicants.

It is hard to believe that Coventry teachers were unaware of the importance of appearance at interviews. They were informed of it often enough in reports of the LEA based on local research with employers (MSC/Coventry Education Department:1977a,b,c)[4], employers' research (CBI Special Programmes Unit:1983)[5], by the CCS[6], by the Director of Education and other Education Department staff (CET:22/6/1977)[7] and by employers.[8] Teachers were told of the importance of appearance at interview at a Conference on 'Motivation - Our Common Problem' in the Summer of 1977 by the Director of Education (CET:22/6/1977). The Education Committee were alerted to it in a paper produced by two Coventry teachers.[9] G. Roberts (Precision Engineering) Co's criticism seems to rest not on teachers' ignorance concerning the importance of appearance but their general inability to instil a sense of conformity:

'...if they come into the establishment then they've got to conform a little bit, or look a little bit responsible, not with 'pins through their noses', so to speak.' [Research Notes, employer's emphasis].

If teachers could not get young people to conform then they were not going to take notice of advice to dress smartly for interviews. It was ultimately a matter of instilling discipline.

CEES employers made it clear they did not particularly like jeans and open-necked shirts, but most were willing to disregard them if they were clean, and if applicants appeared to have made a general effort regarding self-presentation at the interview, and that it was clear from evidence from school reports and projected grades that the applicant had a good attitude to work. A few disregarded appearance because they blamed schools and/or parents for scruffiness at the interview. What the bulk of employers particularly disliked was **dirty** jeans and open-necked shirts, coupled with unwashed and/or uncombed hair, or long or spikey (punk) hairstyles and other signs of 'general scruffiness'. For some employers this was all too much, and when an applicant arrived at the interview:

'...wi'long greasy hair 'as never bin combed, a leather jacket with a torn sleeve, then **immediately** 'e's lost 'is opportunity, regardless of

er, 'is academic results.' [Aeroparts: Research Notes, employer's emphasis].

CEES employers came down hard on applicants who chose to dress untidily or outrageously according to their criteria - especially where such wilfulness suggested that it was not just dress but part of their character, the sort of person they were or perceived themselves to be. This was because, as Zargon Engineering explained, there is '...a relationship between how a lad looks after himself and what the lad is.' [Research Notes, my emphasis].

The crucial point is that appearance was mainly taken to be a guide to the applicant's attitude to work/eagerness for the job.^[10] The CEES employers were interested in young people who wanted to work and not slick dressers. The more subtle employers would systematically ignore appearance in relation to a particular applicant if they saw good evidence in other areas that the young person's work attitudes were acceptable.

Appearance: Craft and Technician

Amongst employers who mentioned appearance for craft and technician the weight they put on it and its significance varied. For example, United Industrial Fasteners said that appearance was something looked for in both, but noted that:

'...you view craft different t' technician on this. Er, on the technician side you expect the young person to present himself the best 'e can. Normally that's the best he'll ever be!...[Laughs]..That's the best they're ever gonna be - so it's gonna deteriorate from there! But usually you find a technician comes along in either a sports jacket and flannels or a suit. This is always a good impression to start with.' [Research Notes, employer's emphases].

For craft, appearance standards were not set so high and United Industrial Fasteners accepted the odd craft applicant who turned up in a bomber jacket, although cleanliness was expected from craft. At Casablanca Cars appearance was important for both craft and technician, but the way in which it was defined was significantly different. Appearance at the interview was important for craft as: 'First impressions are important, no matter where you go...', but:

'Certainly, if we had somebody who came in to be a millwright and he'd got his best suit on, his nails perfectly clean, (and he looked as though he'd never got his hands dirty before, you know), then you'd think twice.' [Casablanca Cars:Research Notes].

A smart appearance could work against craft applicants if they looked too well-dressed. It might seem that they were more suited to non-manual work. On the other hand, at some firms technician applicants would be taken seriously even if their appearance was scruffy, provided that they could demonstrate a clear willingness to work. But this was not the ideal situation as:

'To see somebody with a tie on is good - it's as though he's made an effort...So we look for people that are gonna fit in to the drawing office area.' [Casablanca Cars:Research Notes, employer's emphasis].

In general technician applicants were expected to be more 'dressed-up' than craft applicants. In cases where the engineering employers said that appearance was looked for in relation to both craft and technician they tended to set more rigorous standards for technicians.

This section argued that appearance was an indicator of work attitudes, the most important category of labour power attributes. It also indicated certain social attitudes (Section v). The next section examines one of the attributes indicated by appearance; a good attitude to work/wants to work. This takes place within a more general discussion of the views of employers, educationalists and researchers in Coventry on the work attitudes of Coventry youth, as this throws light on certain facets of the arguments of Coventry employers, and places the discussion in social context. This was possible as so much was said on work attitudes in the public domain.

(iii) Work Attitudes and Employers in Coventry and GOOD ATTITUDE TO WORK / WANTS TO WORK

Chapter Six showed and explained the importance of work attitudes in terms of their centrality as labour power attributes. It also examined the literature, debates and studies on youth recruitment. It did not examine the research, observations and commentary specific to Coventry which illustrated

the importance of work attitudes. This is examined here in context.

Research with employers in Coventry was in line with other studies on the centrality of work attitudes. A study commissioned by the Coventry Education Department and the Local Office of the MSC in 1977 (IFF:1977), found that 'attitude and willingness to work were the most important factors'(p.8) in the recruitment of both young people and adults. This study was part of the 'Coventry Report', as it became known locally (MSC/Coventry Education Department:1977a). This Report found it '...difficult to define exactly what Coventry employers want of young people'(ibid.p.38). But it affirmed that: 'Above all, they want applicants who are willing and have a co-operative attitude to work.'(ibid.) The Report noted that apart from physical fitness young people compared unfavourably with adults in the eyes of the City's employers. Young people were '...particularly criticised on work attitudes, appearance and basic education.'(ibid.)[11]

Work carried out by Bazalgette (1978) in Coventry between 1971-1975 found that some of the employers he studied, '...were critical of young peoples' general attitudes to work, to punctuality, and to reliability.'(p.99). Interestingly, in a detailed examination of two engineering firms in the City, Bazalgette found that the apprentice training supervisor at Polydra Engineering Group looked for applicants with a 'capacity to work', and the 'one question' he was interested in was: 'What is his work-rate like?'(p.17).[12]

Frith and Buckley's Coventry research (Buckley:1977; Frith and Buckley:1978; Frith:1976,1981a) in the mid-1970s, found that employer dissatisfaction with the work attitudes of young people was over-generalised by previous research. Buckley (1977) pointed out that, in general, employers were satisfied with the work attitudes of apprentices. Employers were less happy with the work attitudes of trainees and particularly critical of young people in unskilled jobs (p.7). Buckley's findings added to the blanket condemnation of youngsters' work attitudes found in the 'Coventry Report'.[13]

The Coventry LEA seemed to take a similar view to local employers, echoing

them in their view that the work attitudes of local youth were deficient. In Coventry Education Committee (1981), a report on the education of 11-19 year olds, the LEA's experience of working with the young unemployed and with employers was noted. It was argued that this work had yielded significant insights. One of these insights was that the attitudes and personal standards of the young were most important in recruitment. In particular, the Director of Education propagated the view that the work attitudes of young people were problematic for employers, teachers and young people themselves as:

'The critical factors which seem to determine whether a youngster gets and holds a job are more connected with the personal standards and attitudes of the individual youngster..[than with examinations]: willingness, attention to detail, ability to work in a group or listen to instructions, punctuality.' (Aitken:1981a).

Not only were work attitudes of young people problematic, but they were simply not good enough (CET:17/10/1979).[14] This view was held in Coventry Education Department's Forward Planning Unit, who advocated changing this situation so that '...general educational provision..[offering]..appropriate opportunities for development' would result in young people acquiring '...attitudes which foster flexibility and adaptability.' (Coventry Education Department, Forward Planning Unit:1984b,p.30). The view that work attitudes of young people were deficient was not held by the CCS, at least not from the mid-1970s.[15] The public position of the CCS was that young people wanted to work. This was understandable given their role of convincing employers to take on youth in a difficult labour market situation. Internal documents referred to a hard core of jobless youth who refused YOP/YTS schemes because they were 'apathetic,lacking in motivation, confused'(CCS:1982f) - a position not essentially different from the 1960s according to the CCS (ibid.). Stratford Careers Officers were more prone to criticise the work attitudes of young people publicly in the local press. One explanation of why 'job training vacancies are going begging in Coventry and Warwickshire'(CET:17/8/1983) given by a Stratford Careers Officer was that young people 'were making the most of their summer holidays.'(ibid.). Images of young people lying around in the sun uninterested in training

opportunities, easily spring to mind (CET:17/8/83; Richards:1984).[16]

Local teachers also made public statements about the poor work attitudes of young people. Pupils at Sidney Stringer Comprehensive were informed during their prize-giving by a former head of the lower school that if they did not get jobs they had 'only themselves to blame.' (CET:17/12/1980). The Head of Caluden Castle School, noted how:

'Our local employers bemoan low educational standards, poor trainee motivation and attitudes', ..[and concluded].. 'Action is plainly called for.' (Inness:1979).

Local employers commonly used the 'Coventry Evening Telegraph' to express their view that the work attitudes of young people were deficient. Engineering employers in the City led the way. Ken Wardle, MGTS recruitment officer, thought that in apprentice recruitment: 'The main problem is one of attitude', as 'Some are not prepared to take a job if it means taking more than one bus to get there.' (CET:7/8/1980). In Wardle's view, this was because: 'Some would be as happy out of work as in - although to be fair, the vast majority would not.' (ibid.). George Butler, divisional organiser of the Amalgamated Union of Engineering Workers (AUEW) admitted that he was 'amazed' at the reports of apathy 'at a time when so many people are out of work' - and he did not contradict the MGTS's or the CDEEA's views on young peoples' poor work attitudes in the same newspaper article (ibid.).

There is also evidence to suggest that young people **themselves** thought the work attitudes of their peers were poor. A study carried out by the Coventry Youth Opportunities Unit into the attitudes of trainees on the YOP doing Short Industrial Courses (Coventry Youth Opportunities Unit:1978c) revealed that the 78 trainees interviewed were:

'...influenced by a generally held belief that some unemployed young people are not interested in finding work.' (p.10).[17]

The generally held belief that the work attitudes of the City's youth were poor was at the centre of a virtual propaganda war in the City's media from 1979-1981. The CCS, through its paper for the young unemployed, the 'Jobhunter', and the Coventry Workshop, (a trade union advice, research and

information unit) were arguing that young peoples' work attitudes were not the problem, against employers, the LEA, the Chamber of Commerce and the 'Coventry Evening Telegraph' who were arguing the opposite. The City's Youth Opportunities Unit, set up to administer the Coventry Youth Programme in May 1976, oscillated.

Given this background, and the relationship with appearance established in the previous section, it is surprising that the generalised reference to good attitude to work/wants to work was not more important in the CEES. However, CEES employers tended to view attitude to work in a largely specific engineering-oriented way. Keeping their own labour processes in view, they deemed 'a good attitude to work' to be too general. Specific work attitudes such as interest in engineering/job/trade were more commonly referred to when aggregated. Many were sceptical of an applicant who was clearly not interested in engineering, the job or the specific trade they were applying for, no matter what evidence such as school reports said about their attitude to work in general or in subjects not related to engineering. They wanted recruits who would work for them, in their labour process.

Two further points need to be made about this attribute. First, the two aspects, good attitude to work - wants to work, were conjoined because they were generally related in the minds of the employers. If someone had a good attitude to work then they wanted to work; if someone wanted to work they had a good attitude. The two were commonly linked in employers' comments; although there are logical differences which we need not explore here. The wanting to work element reflected the subjective aspect of labour power, where the labourer's will is partially subsumed under her/his labour power, creating fewer supervision problems and lessening recalcitrance. Secondly, good attitude to work/wants to work is a general statement which covers more specific statements about work attitudes such as 'dedicated', 'quick worker' or 'prepared to work Saturdays'. But if employers mentioned the latter these were counted as separate references, unless the former was defined in terms of the latter. The point is that when employers talk about work attitudes they either make a general statement (and this is what is being examined here), and/or specific statements (particular aspects of what constitutes a

'good attitude to work'). A full analysis should both separate these to be true to the complexity of employers' responses and then aggregate them so that comparisons can be made across broad categories of attributes sought by employers in young job applicants. Researchers have ignored these points.

A Good Attitude to Work: Employers' Views and Some Evidence

The qualitative data yielded additional insight into the importance of this attribute. For CEES employers, there was little to be said on the matter; it was self-evident that a good attitude to work was essential. Finding young people who had it was '90% of the battle', according to Stanford Engineering. Comments tended to be terse and expressed forcefully, such as:

'I want a lad who is prepared to work. That's the first thing!' [Zargon Engineering Ltd.:Research Notes].

'...his attitude - he must want to work damn hard!' [Arc Metals & Plastics:Research Notes].

Some City educationalists also took such a commonsense attitude. John Temple, Leader of the Education Department's Youth Opportunities Unit, argued that the chances of young people being unemployed for long periods depended on their academic record, interview skills and attitude to work, and their preferred occupational area. Those young people who had the right work attitudes were especially less likely to be unemployed as:

'...there are still many employers keen to support motivated boys and girls with the offer of a first job.' (CET:21/2/1978).

With 2,690 school leavers seeking permanent employment in Coventry in February 1978,^[18] either Temple seriously over-estimated the number of employers keen to offer youngsters a first job or the work attitudes of young people in the City had deteriorated drastically in the mid-1970s. If the latter was true then it was surprising that so few CEES employers pointed to work attitudes amongst Coventry youth getting worse. It was not something they spontaneously brought up during interview. The CDEEA thought work attitudes had declined. The Association's Training Executive, Roger Gilbert, in a paper on standards of literacy and numeracy amongst school

leavers (Gilbert:1977), also argued that there was an 'attitude/motivation' problem with young people. Attitudes had got worse as well as basic education. Gilbert gave little evidence to back up his claims.

The researchers for the 'Coventry Report' had found some evidence of deterioration in work attitudes amongst young people. However, it was not conclusive - 35% of the employers surveyed in the City thought that the calibre of young people had deteriorated, with those in manufacturing industry, especially medium-sized firms, being the most critical of the overall standard of young people (IFF:1977). Specifically, 31% thought work attitudes had deteriorated; but by implication 69% thought they had **not** deteriorated (ibid.). It was also discovered that 42% of respondents criticised standards of general education and attitudes to work for non-manual grades, but only 22% did so for 'other manual...where personal attitudes and behaviour were more important.' (ibid.,p.8). A CDEEA survey in 1980 revealed 16% of employers surveyed said that they were '...concerned about the motivation and attitudes of applicants.' (CDEEA:1981,p.7). Even if it is assumed that all 16% showing concern believed work attitudes had worsened, the logical corollary of this is that 84% thought they had not deteriorated. The evidence for a view amongst Coventry employers that there was a significant deterioration in the work attitudes of young people in the City during the 1970s was not great, at least for skilled manual jobs, and especially for engineering apprenticeship applicants.

Yet local engineering employers were concerned about the work attitudes of young people; if there was little solid evidence of deterioration there was more evidence suggesting that engineering employers wanted an improvement. For leading representatives of Coventry's engineering industry, the acid test of whether young peoples' attitudes to work needed improving was their response to the lack of youth jobs. Youth were expected to fight for jobs in a worsening youth labour market. According to Ken Wardle, MGTS recruitment officer, the City's youth were failing this test. He urged them to:

'Get out and fight for jobs...The world does not owe you a living, you have to get out and grab it. You really have to fight.' (CET:22/11/1980).

The Coventry organiser for the EITB levelled a similar criticism at school-leavers ten months later, accusing them of being 'half-hearted in attempts to find work' when insufficient numbers of young people of the 'right calibre' applied for 20 EITB first year apprenticeships (CET:20/8/1981). The CBI Special Programmes Unit (1983) noted that the City's employers thought young people showed '...a lack of drive, discipline and initiative.' (para 7.3.7.) But how were young people to fight for jobs? Hills Gears from the CEES had a ready answer:

- E 'They should be, (as I mentioned earlier on), ready to go from door to door until they get a job. It may suddenly happen that when they go they get one that very minute...Okay, I'm not sayin' that they should be starvin' an' crawlin' to the factory gates, but 'ow else do you put something into them to make them realise the value,...of ya know?
- G If the one-and-a-half thousand unemployed young people in Coventry that left school last year lined themselves up outside your factory, what would it prove?
- E It would show to me that they'd got a realisation of how important it was for them to get a job...A lot of them aren't even looking. This is my argument.' [Research Notes, employer's emphases].

Certainly any collective fight for jobs seemed unlikely either by young people or trade unions on their behalf. Prominent union leaders echoed the engineering employers. According to George Butler, divisional organiser of the AUEW in Coventry, he had discovered from his:

'...own dealings with employers that they are not happy with young peoples' attitude to work discipline and discipline in general. However sympathetically you look at the problem, I do not think it will be solved in the coming years without some major change in our social and educational attitudes.' (CET:17/11/1980).

Educationalists, especially the Director of Education, were also quick to embrace the employers' concern to improve work attitudes amongst the young (CET:17/10/1979).^[19] Cross (1983) argued that the Coventry LEA's efforts to 'educate attitudes for work' through changes in the curriculum and an extensive use of MSC training initiatives might be simply:

'...using Manpower Services Commission money to inculcate the work ethic in those who will have no work.'

Certainly no-one could accuse the LEA of not trying to improve young

peoples' attitudes to work, but we need not go into the measures introduced to achieve this goal here. We need only note that the engineering employers' views that attitudes to work needed improvement were fully embraced by leading educationalists in the City. They embraced this 'generally accepted view'(Coventry Youth Opportunities Unit:1978c) with major consequences for the organisation of school/work links in Coventry, especially the relationship between education and training.^[20] The only public criticism of the notion that improving young peoples' attitudes to work would create youth jobs came from the Coventry Workshop, who argued that:

'Contrary to what some employers would have us believe, reforming education to include training in relevant skills and 'attitudes' cannot in itself create jobs.'(Crisis Group:1981).

The Coventry Workshop was clearly out-of-step with engineering employers, trade union leaders and representatives of the LEA.

Employers' Explanations of the 'Decline' in Work Attitudes

The few employers who argued that attitudes to work had worsened amongst applicants for apprenticeships also had various explanation as to why this had taken place. According to Argon Jig & Tool, attitudes to work had got worse because teachers had failed to criticise and correct enough, so pupils got the idea that sloppy work was acceptable. This idea was reinforced in industry when workers got away with producing below target and received praise when producing on target. The whole process was further reinforced by school mates and unions and other apprentices at work who tried to put breaks on the individual achieving more than was acceptable. The whole process undermined attitudes to work. Thus, it was '...just the general climate that's wrong.' [Argon Jig & Tool:Research Notes]. Teachers and management had a duty to break the spiral, and: 'By all means praise the achievement, but identify the weaknesses as well.'^[21] In effect, the exchange aspect of labour power, and labour power attributes relating to it was not being sufficiently nurtured; not enough regard was given to attributes intimately related to valorization. The CDEEA also blamed the

schools for this, although not in such a thoughtful way. The CDEEA Training Executive called for a 'return to old-fashioned discipline and control'(Gilbert:1977,p.7) and argued that that there might be insufficient 'dedicated teachers...good enough to implement this type of education.' (ibid.). A subsidiary explanation was that:

'...schools have failed to impress on pupils the relevance of the subject matter to their needs in adult life.'(ibid.).

- young people will want to work when they see the relevance of what they were doing (Gilbert:1977,p.7). The 'Coventry Evening Telegraph' also saw the 'matter of attitude' as the fault of the schools for:

'How much frustration on the factory floor can be traced back to schooldays?'(CET:13/12/1976).

In the explanations described above, the overwhelming response was to blame young people themselves and above all their schools, particularly teachers, for poor work attitudes. This was a well-worn path, noted by many; schools were failing to teach the work ethic in sufficient doses (Frith:1978b,1980b; Finn:1979,1982; Sarup:1982; Brown:1987a).

In the CEES, Hills Gears was unique in trying to explain deteriorating work attitudes amongst the young in terms of the Careers Service. Hills Gears blamed the Careers for poor work attitudes as they gave advice, (in their newspaper, 'Jobhunter'), on:

'...how to sign on the dole, how much money you get and 'ow to get on social security!...It's just that it teaches them that that's how to leave school.' [Research Notes].

This did not encourage young people to look for work and encouraged them to be dependent on the state (for money), and the Careers (for jobs). Hills Gears wanted to see young people hammering on employers' doors for jobs. This would show they really wanted to work.

The Importance of a Good Attitude to Work

Apart from the obvious consequences of young people not having a good

attitude to work, (lost production from 'skiving', 'horseplay' or 'hanging out in the bog'), engineering employers in my study saw its importance in terms of not wasting the time of craftsmen and training personnel. Given the costs of supervision:

'...you need some admission from ..[applicants].. that they're gonna put in four years of 'ard work, 'cos that's what it's all about - four years of 'ard trainin' in different surroundin's, with people who in many cases, 'aven't got the time to train 'em. They've gotta accept the situation that , in industry generally, there's not a man just nominated to stand over 'em to make sure they're doin' a job right.' [Wroxborough Jig & Gauge:Research Notes].

Wroxborough needed consistent effort from apprentices because they would have to work on their own for much of the time. They required applicants who would be suited to the cost-cutting methods employed in Wroxborough to socially produce skilled labour power; through doing production work with minimal guidance from skilled craftsmen. This was one form of socially producing skilled labour, where production work done by those on low wages and training coincided, that helped apprenticeships survive. Employers could support apprenticeships as long as they cut their costs on socially producing skilled labour power through such methods.

It was the small/medium firms who were without training and personnel staff who mainly saw the importance of a good attitude to work in terms of supervision costs. The better the apprentice's work attitudes, then the less supervision was required; he would just get on with what he was told to do. It cost money to take craftsmen off production to supervise young people and the management at these firms were either thin on the ground after redundancies or harassed trying to survive. Apprentices with firms using MGTS saw their training officer once a week at the most.^[22] Thus, supervision costs was a partial explanation of the importance given to work attitudes. The more developed, the higher quality, an apprentice's work attitudes were, the less supervision was required. This was ultimately an expression of the contradictions between aspects of labour power. Poor work attitudes reflected the subjective aspect of labour power, where the will of the worker was insufficiently subsumed within his own labour power to comply with the exchange aspect. This was experienced by the employer as

recalcitrance, lack of effort through not putting enough of her/himself into her/his work through identification with her/his own labour power.

In larger firms, training staff and supervision were more readily available but young people coming into large firms had to realise that they would not always be doing interesting work. At Altex Engineering they were:

'...looking for those who are able to 'stick at a job', which is, (perhaps in some cases), boring, as machinists. Turning, milling, grinding - these sorts of things - can, under certain conditions, on repetition jobs, become pretty boring. And, [silence]..er, we're looking for somebody who essentially, will be able to come to terms with that aspect of the job.' [Research Notes, employer's emphases].

A good attitude to work for Altex Engineering craft apprentices was defined in terms of their ability to withstand boredom. This involved the development of labour power attributes relevant to the exchange aspect of labour power. Youth entering Altex Engineering must be under no illusions; despite being a large, well-known firm, Altex was just as subject to the exchange aspect of labour. It was not to be all creative and interesting work, where the use value aspect of labour power would be unleashed. At the base of the engineering employers' concern about young people having a good attitude to work was the need to minimise supervision costs and a belief, (for larger firms and for craft apprentices), that if they had the right attitude they would 'stick' at the job. Underneath these surface phenomena lay deeper contradictions within labour power.

Frith, drawing on his work with Coventry employers carried out with Buckley in the mid-1970s, concluded that:

'Many of employers' complaints about young workers are really complaints about the cost of direct discipline, of the training and constant supervision involved.' (Frith:1980b,p.39).

Essentially, I hold the opposite view; complaints about supervision costs were about poor work attitudes. The relationship between a good attitude to work and ability to work with a minimum of supervision goes some way towards explaining why some employers preferred young people with a good attitude to work rather than good qualifications, if a choice had to be made. In their own terms, many CEES employers said that they preferred the 'trier' to the

'high flier'. Arc Metals & Plastics noted that it was important whether:

'...they have any intentions to work and to, (you know), stick at it. Because I take the view, (a view which is, and you may not agree with this), that it doesn't matter how good you are at different subjects, if you're gonna spend half your bloody time skivin' off with your girlfriend: Right?' [Research Notes].

Bird Panels gave a long story about an applicant who was taken on with poor qualifications, (against the wishes of the MGTs), but who had a good attitude to work and did well. The implication behind the story was that a good attitude to work can overcome the 'handicap' of poor qualifications. Besides, Bird Panels did not see it as a handicap for applicants to have poor qualifications as:

'I don't want 'im for an academic! I want 'im to know 'is weldin' inside out!' [Research Notes].

and the lad referred to above 'must have been a good welder', as he won the Blundell Award.[23]

In the view of Church (Patternmakers), it was always best to choose 'a hard worker rather than a capable lad who is lazy!'. In training, Church used to:

'...try and inculcate into any apprentice.. a sense of urgency...uhm, and it's no satisfaction for us to have an apprentice who is slow or lazy or who has no sense of urgency..if they don't pull their weight they get the 'push'.' [Research Notes].

Church tried to recruit 'triers' and did not ask for any qualifications. Frith (1981a,p.25) also noted the propensity for small engineering firms in Coventry to recruit young workers with the right attitudes to work over and above those with formal qualifications, and reject 'riff raff' sent along by the Careers Service in favour of recruits via family and friends. On all these aspects Church was archetypal.

A Good Attitude to Work and Interest in Engineering and the Job

Dryden Electric Hammers, who referred to looking for applicants who a good attitude to work, had to 'get rid of' a (craft) apprentice of 1980/81 because of his poor attitude to work. Dryden stressed that they wanted

'somebody who is prepared to work', and that the craft lad was sacked as he:

'...wasn't showing an interest in what he was doing. Academically he was okay, but he just didn't have the right attitude to his work.'
[Research Notes, employer's emphasis].

Here, an employer is viewing attitude to work in a specific engineering-oriented way. A 'right attitude to work' here meant not just a willingness to work or an enthusiasm for work in general, but an enthusiasm for a particular kind of work - engineering machine shop work. The CEES research showed that engineering employers in Coventry tended to see 'a good attitude to work' not in some abstract way - something a young person 'had' which could be transferred to all work environments. They saw it largely in concrete terms; whether an applicant had a good attitude towards working in engineering first of all, and even more concretely, in the particular job or trade on offer - in the employer's labour process. They acknowledged that even young people with a good attitude to work in other respects might not choose to display it if they did not want to be an engineer. With this in mind let us now turn to interest in engineering, the job and the trade.

(iv) INTEREST IN ENGINEERING, THE JOB AND THE TRADE

The CEES employers were more concerned with interest in engineering than they were with general references to work attitude. References to interest in engineering were scattered throughout the interviews. Small group A firms seemed obsessed with it, giving numerous case histories of apprentices who were not basically interested in engineering, which usually ended up with them leaving the firm. Comments such as: '...they must be interested in engineering first and foremost.' [D. Clarke, (Engineers):Research Notes], or young people must be 'engineering oriented', [Harvey and Brinton:Research Notes], were typical. Indeed, Rex Hydraulic Components said that one of the reasons they had moved from Rugby to Coventry was that the workers in Coventry were more 'engineering oriented'. By this Rex meant that:

'The performance of young people generally, from an engineerin' point of view, is far superior in Coventry' [Research Notes].

Coventry was an engineering town with people who had it in their blood. If this was so, why was it that employers in the CEES gave the task of finding 'engineering oriented' young people such prominence? Why did engineering careers literature have to specify that only those '...willing and interested in joining the industry' need apply? (CDEEA/Coventry Chamber of Commerce:1980,Talbot Motor Company). Findings in Chapter Twelve show they had real cause for concern. There was a real crisis of interest in engineering. Here, it is illustrated how CEES employers viewed and defined interest in engineering, and how they differentiated it from interest in the job and the trade, and why they did the latter.

Firms that specified interest in the job/trade/ did not tend to also refer to interest in engineering, and vice versa. Davies-Roche and E.G.M. Engineering were exception here. The key point was the level of interest. Some employers required an interest in engineering. Others were more specific, looking for an interest in the particular trade their firm was engaged in, or even more specific, a particular job within their firms. Interest in the job/trade was obviously a more specific form of 'interest' than interest in engineering. The firms specifying the former did not typically want a general interest in engineering. The firms mentioning interest in the job/trade were typically small group A firms (up to 50 employees) who employed no technicians, and four out of the nine group A firms mentioning it were patternmakers. These employers had a strong attachment to their respective trades. They looked for applicants who were similarly fired with a passion to be a patternmaker or gear-grinder. Teltec Systems, a firm working on prototype car designs and experimental gear-boxes, were looking for youngsters with a deep attachment to their highly specialised trade in the sense that applicants had a deep interest in cars and some appreciation of the fundamentals of roadholding, drag and fuel-consumption. They were not keen on young people who were just interested in the glamour and image of cars.

These employers often said that a deep interest in the job/trade was necessary in applicants as they might be working in the trade for life; there was not to be much internal functional flexibility here

(Pollert:1988). Hence, an applicant must be:

'...prepared to realise that he's got to work for forty years; therefore he's got to like it.' [Power Engineering:Research Notes, employer's emphasis].

For firms such as Power Engineering, the following careers advice, from a Careers Guide in the 'Coventry Evening Telegraph' was apposite:

'If you ask employers what basically irritates them most, it is job candidates who have done no sort of homework on the firm or the organisation. It's not just a case of flattering the employer, but of showing some grasp of what the business is all about. Employers feel that anyone interested enough to want a job with them might have found out what they make or do, what their place is in local or national affairs.'(CET:12/3/1979a).

Much of the careers advice aimed at engineering apprenticeship applicants also stressed that they should have an awareness of the particular jobs or trades they were applying for. A CCS booklet noted that applicants should:

'Be prepared at interview to display a knowledge of the Company's products and some understanding of the occupation for which you are being interviewed.'(CCS:1979a,p.1).

Commitment to the job or trade, as well as an understanding of what it was, was also advocated (ibid.). This was sound for firms that specified interest in the job/trade. It was essential in the small firms specifying interest in the job/trade that applicants displayed they knew something about the type of work they were going to do. It was inappropriate advice for those that stressed interest in engineering. How were applicants to know which firms were which in advance? The basic unfairness of this strategy emerges on this question.

There were problems in trying to get young people with a very specific interest in a job or trade. It made recruitment more difficult. Jay Press Tools summarised the dilemmas:

'A lot of 'em come 'ere wantin' a job and they're not interested in apprenticeship, or if they are interested in an apprenticeship they're not bothered in the job. Handle-pullin' jobs; there's a few of those jobs. And they may, at sixteen or seventeen, pay more than apprenticeships,.. (they tend to, this handle-pullin'),..but by eighteen or nineteen the interest has gone. We stress that we want someone that's gonna stick it for the four years, and usually they call. They're the

ones that call with the father and they're the ones' that's interested.'
[Research Notes].

Jay Press wanted a deep identification with the work. The young person's will must be deeply subsumed under his labour power, and also within the further social production of his own labour power through apprenticeship training. An interesting point was that Jay Press did not advertise its apprenticeships as they felt it would bring in those not sufficiently interested in the job, those whose will was not sufficiently subsumed and hence lacked the depth of identification with the work and apprenticeship. They relied on applicants coming from the sons of employees and friends, who would have some idea what was involved, and those that called round with their fathers who had taken their own initiative to find out.

Another problem was that advertising apprenticeships might also attract people who did not know what they wanted to do at all but just wanted a job. Teltec Systems argued that many young boys at the age of sixteen did not know what job they wanted. David Welbourne, MGTS General Manager, pointed out why taking on young people who were not committed to a particular job might ultimately create problems:

'Employers have often been hesitant in taking on youngsters straight from school. School leavers often have no idea of what sort of work they would like to do...During the first few weeks of employment the youngster may develop a poor timekeeping record and show lack of interest because he is/she is totally unsuited to the job being done.'(Jobhunter:6/3/1979).

Welbourne argued that this difficulty was lessened if youngsters had already had some work or training experience. Young people doing work experience courses would have a better idea of aspects of different jobs they liked and did not like. Job choices would be more informed by experience. Those not interested in engineering apprenticeships were warned not to apply to the MGTS (MGTS:1980,p.2).^[24] As we shall see in Chapter Twelve, the uninterested not only applied, but got in in surprising numbers.

In the CEES there was considerable disagreement as to what extent applicants for apprenticeship should be aware of and interested in the particular job or trade they were applying for. The level of interest (in terms of being

interested in engineering in general or specific trades or jobs), was a crucial issue in a number of firms. Firms such as Olmec Machine Tools were:

'...interested to know if they are aware of the job that they're gonna do, or made an application for, - what it entails. That they've shown previous interest in the job,.. that they've actually tried it, or it's part of their hobby... And thirdly, hopefully that they've been busy at home, or as part of a club, or something, building baby computers, or something. That's the sort of thing we're looking for to back up the formal qualifications.' [Research Notes, employer's emphases].

This indicates a fairly deep identification with the job. Earlier in the Olmec interview, the interviewee had explained that he was not looking for detailed technical knowledge which would only come from training and doing the job. He did want applicants to display a general awareness of the job.

On the other hand, other employers argued that it was unfair to look for an interest in a job or trade - young people did not usually have the opportunities for finding out about them. It was unfair to those whose Dad's were not engineers, or who had poor metalwork departments at school. It was also unfair for girls who had had little contact with things mechanical as part of their socialisation; although only Olmec amongst these critical employers picked up this point. These firms tended to be the ones who looked for a general interest in engineering. Such firms did not try to 'catch out' applicants on details about the job or trade. They were not interested in young people with fixed ideas about what they wanted to do. The research carried out for the 'Coventry Report' found that personnel managers:

'...were not surprised or offended if applicants knew little or nothing about the firm. They considered it was one of their own tasks to impart that information.' (IFF:1977,p.7).

The important point was that personnel managers had said this, indicating that the writers of the research report were talking about medium to large firms. Very generally, those firms who were looking for young people with a general, broad interest in engineering tended to be medium and large firms with personnel or training managers/officers or small firms not engaged solely in one of the specialist trades (such as patternmaking). The explanation lies largely in the fact that these firms did not always know

where they were going to place the apprentice after his training at the point of recruitment, and sometimes well into the apprenticeship. Thus, they wanted no fixed ideas, no firm commitment to specific jobs or trades. Also, as we shall see below, it was easier to move apprentices about to different trades, from milling to grinding or vice versa, during the apprenticeship if either demand patterns changed in the four years of the apprenticeship, or the apprentice excelled at something other than her/his designated trade.

On the other hand, those who wanted young people interested in a specific job or trade were typically small patternmaking firms and other small firms doing specialised work. In these specialist trades, where it was obvious what the apprentice would eventually be doing, a firm commitment to the job or trade was essential, as employers saw it almost as a life-long vocation.

Clearly, the level of interest could be inappropriate according to these distinctions. Bell Components, for example, were looking for applicants with a general interest in engineering. What they did not want was an applicant expressing a firm preference to be a toolmaker, for if it was clear at the end of their first year that they would not make the grade as a toolmaker they could sometimes be moved into machine shop work or fitting/assembly. A firm commitment on the part of an applicant to toolmaking might make such transitions difficult. Young people following the advice of some Careers Officers and teachers to have a clear idea of what they wanted to do might wish they were more confused on applying to Bell Components. Bell thought that expressed interests in trades not available at the firm was very bad. Such preferences would seriously damage an applicant's chances.

In contrast to Bell Components, firms such as Vortex Patterns and Trinity Patterns valued interest in an applicant in a highly specific form; interest in patternmaking. At the other end of the scale was H.F.C.(UK) Ltd. who wanted young people who were interested in 'something'. An ultimate abstract notion of interest. H.F.C.(UK) were looking for technicians:

'...interested in life and interested in doing things...I don't mind **what** they are interested in, so long as they are interested in **something** and they can talk about it.' [Research Notes, employer's emphases].

Interest here becomes broad, general and abstract. The key point is that ultimately this general interest is put to practical ends, for:

'We find that when they come we can harness that energy, that interest, towards engineering, towards the thousands of things they've got to do here, and they'll make good technicians out of them.' [ibid.].

The examples of the last few pages show that the level at which an applicant pitched their interest could be decisive in determining the success of their efforts to enter particular firms. But the H.F.C. example shows something even more important; that even at the most abstract level of interest it was the individual capital, especially the labour process of the recruiter, that was to the fore. At H.F.C., a general interest in things, in life, becomes harnessed to the labour process at H.F.C.. Furthermore, we have seen that those specifying interest in engineering also had their own capitals in view; they were not altruists, training for the whole sector of capital. Again, this general interest was to become concretised within a particular engineering capital. The problem was that some could not say in which form this concretisation would take place, what particular trade or job the applicant would go into. Hence they specified a general interest. Others saw that specifying a general interest was more appropriate as young people, structurally cut off from the world of work, without parents in engineering, and with poor metalwork classes in school, may have had limited access to finding out and becoming committed to particular trades. They might lose good applicants if they were specific. As long as the general interest could become concretised in the final trade chosen by the employer, this was all that mattered. These employers were not being irrational; they were in fact being very subtle in relation to their own interests. Attributes such as interested in engineering were not what they seemed; they did not refer to training for the industry in general, and no comments by CEES employers suggested that this was what they were about. Their own capitals, labour processes and labour power attributes to be developed in apprentices in relation to these, were always in view in the final analysis.

Mistaken Identity: Making Mistakes on Interest in Engineering

Making a mistake on interest in engineering could prove a costly time-wasting affair. The employers were quick to volunteer a number of case histories on this to prove the point. Avoidance of mistakes rested on the employers successfully determining clear answers to the following questions put forward by Jay Press Tools :

'Are they genuinely interested in engineering or are they just applyin' for a job? Or is it that they just want a job for a few months, and then the novelty's worn off? We want to know that they want to stick it..' [Research Notes, employer's emphasis].

Supervision and training resources were otherwise squandered. A problem was to determine whether an applicant's expressed interest in engineering was genuine. With high youth unemployment and its accompanying pressures to get a job at any price - this was not an easy task. D-Gear and Equipment wanted applicants coming to the interview with a genuine interest, and: '...not pushed by parents'. Craig Bros. tried to make sure the applicant was not applying because: 'Dad said I gotta do this; or I gotta do that', as they had found it to be common amongst applicants.

Employers wanted parents to be interested in their sons/daughters' apprenticeships but it was no use if they pushed reluctant young people into engineering apprenticeships. Furthermore, some applicants were conning employers. A few employers argued that young people sometimes tried to get engineering apprenticeships purely because they believed it would provide a relatively secure future - at least for four years - in a period and in a City, of relatively high unemployment. These youth were not really interested in engineering. Two employers were candid enough to tell me that this belief - that engineering apprenticeships were a ticket to job security - was mistaken in the context of the 1980's. If parental pressures were working in the opposite direction, if parents were trying to dampen down a youngster's enthusiasm for engineering, and yet they still persisted in their career commitment to engineering, this was viewed as highly desirable.

Another problem was where an applicant's spare time interests took up more of their energy and commitment than their apprenticeship. The employers

liked applicants with hobbies. They did not like all hobbies, especially when they thought the apprenticeship was just subsidising a young person's main interest in life. Young people playing in bands were a source of deep scepticism. Morton James Precision Tools argued that those in pop groups or who played the guitar were usually more interested in that than their apprenticeship. G. Roberts (Precision Engineering) Co. also found that the odd apprentice was willing to make the dash for stardom:

'One came here, started...and then went to join a Rock-an'-Roll band...[deep sigh by employer]..' [Research Notes].

These employers were suspicious about the extent to which the applicant's will was subsumed within her/his labour power. In fact, they believed the applicant was 'exploiting' the employer here; merely subsidising leisure pursuits with no real interest in work. Such people could be a bad investment. It increased the chance of young people leaving before their apprenticeship was finished, making it impossible to recoup capital gone into the development of the wayward apprentice's labour power. But how to spot the interested applicant? Common methods were asking them why they were interested, observing reactions to the factory tour, seeing if they had hobbies loosely related to engineering and if they liked school metalwork.

The final section moves away from work attitudes. It looks at ability to mix/fit in; an important social attitude. This attribute has more to do with valorization than might be surmised. CEES employers were not just looking for nice people.

(v) ABILITY TO MIX/FIT IN: A MATTER OF COMMONSENSE?

At first sight, this attribute seems to be a straightforward matter. In fact it is a highly complicated affair. The current literature is far superior on this attribute as compared with work attitudes. As Hohn (1988) notes, the personnel manager has to make sure:

'...that the newcomer will be integrated into the existing workforce and that he or she accepts the goals of the organisation.' (p.84)

The recruiter has to look for people who can do the job in 'technical terms'(ibid.), but also become integrated into the existing workforce. Wood (1988) notes that this, in the first place, is about developing friendships with other workers, but from the employers view it is about more than that. The labourer becomes part of the co-operative organisation of total labour in the particular capital, and especially in the immediate work group. The problem is to: '...represent and reproduce work organisation as mere aggregates of separate self-interested individuals.' (Knights and Collinson:1985,p.201), but in a collective and co-operative form. Co-operation is internal to the labour process (Manwaring and Wood:1985). Co-operation through fitting in and mixing refers to co-operation with management too, and involves workers helping to sort out production problems (Wood:1988). Cressey and MacInnes (1980) note that:

'...in the use value aspect of its relation with labour capital will seek a purely co-operative relationship in order to abolish the antagonism between the worker and the means of production that its capitalist form throws up.'(p.15).

The ability to mix/fit in is a labour power attribute that reflects this co-operative element of the use value of labour. Insofar as it is developed it relates to the use value and collective (Chapter Twenty-two) aspects of labour power. This is its basic significance.

Researchers in Coventry treated it in far less sophisticated terms. Research into the criteria of recruitment used by employers in selecting Work Experience on Employers' Premises (WEEP) trainees, carried out by the Education Department's Youth Opportunities Unit in 1979, found that these criteria differed little from the selection criteria used when recruiting permanent staff, and a central criterion was: '...an ability to fit in with other members of staff.'(Coventry Youth Opportunities Unit:1979b,p.13). A CBI Report on Coventry (CBI Special Programmes Unit:1983), talking about a survey on young workers carried out with local employers, noted the importance of: 'training in behavioural disciplines necessary for working in groups for an employer.' (para7.3.7).

The same Report also found that 72% of the employers thought the

'Opportunity to mould the young people from the beginning to your Company's ways' was important. Catching them young aided fitting into the firm.

Recruitment literature also emphasised the importance of fitting in. The MGTS informed applicants that they were looking for people with an 'interest in other people. Also the ability to work and mix with other people.' (MGTS:1980). It was important that young people were aware of it when they went for interview as employers would try (by listening to answers in the interview) to determine '..how well or ill he will fit into the organisation.' (CET:12/3/1979a). The CCS also backed up these media statements on the topic in its 'Jobhunter' newspaper (Jobhunter:30/1/1979,23/10/1979). It also found its way into Coventry Youth Programme publications; the Trainee Handbook of the Coventry Training Workshops in stated that one of the aims of the Workshops was to: 'Help you learn to get on with workmates and supervisors and generally fit in at work.' (Topshop:1981,p.6). Representatives of the Coventry Youth Programme were arguing in the national press that they aimed to make youngsters 'more sociable and eventually more employable.' The two aims went naturally together; sociable people got jobs, (eventually) (Duffy:1977).

The Director of Education in Coventry, believed that an 'ability to work in a group' was one of the 'critical factors' that determined whether a young person could get and keep a job (Aitken:1981a). Such considerations lay behind Aitken's enthusiasm for pupil profiles (Aitken and Handy:1986). An Education Department report declared in 1982 that as 'Examination passes are no longer a passport to a job' then there was a need to 'develop and demonstrate other qualities'. One of these important qualities was a '...greater awareness of others, ability to work in groups.' (Coventry Education Committee:1982,p.5) The Coventry Education Committee were informed that most employers expected young people at job interviews to:

'...take the opportunity to demonstrate their ability to form a relationship.' (Coventry Education Committee:1978a,p.2).

It all seemed commonsense stuff. The notion that mixing/fitting in with people at work had to be something that young people could do had a wide

currency in Coventry. However, the issue was very complicated. Complications arose in relation to a multiplicity of definitions of 'fitting in'.

Ways of Mixing and Fitting in

Some employers used the terms 'fit in' and 'mixes well' interchangeably - which was why they were conjoined. However, there were important differences in the ways in which the terms were used. This is partly suggested by the logic of the meaning of the terms themselves. Ability to mix with people clearly locates the desired characteristic firmly within the social realm. What employers wanted to know was: 'Would this young person mix with the workforce I already have?', and more fundamentally: 'Is he/she a 'good mixer' in general?'. The emphasis was clearly on social relationships. The ability to fit in was a more general characteristic sought by employers; sometimes it referred to fitting in with people, but at other times it referred to the type of work, the physical aspects of engineering factory life - the noise, dirt and grubbiness of some small firms. The main emphasis though, was on fitting in with the workforce:

E 'When they come to me you find out whether they're gonna be the type that are suitable to fit in, with our particular thoughts on business and manufacture, er, attitude towards training,..er,..[silence]..

G How do you mean, 'fit in with your thoughts on manufacture'?

E First of all they've really gotta be interested in engineerin' - 'cos they're gonna spend the rest of their lives working with machines... They've got to be able to fit in with the team we've already got..And that's the secret of any recruitment. You don't wanna get somebody that's gonna cause all sorts of problems, wrong attitudes towards work.'
[Metagear Machines:Research Notes, employer's emphasis].

Metagear started off with a wide-ranging definition - slightly unusual because young people were being asked to fit in with management attitudes on the issues raised - but eventually rested on their ability to fit in with the workforce. At Summit Tools & Components a wide definition of fitting in was initially used but:

'Having accepted that the MGTS have screened them, and...uhm... intelligence wise they fit the bill, the most important thing from my point of view is that they are socially acceptable; that they're gonna fit in with the people we're employing and the type of work we're

doing.' [Research Notes, employer's emphasis].

G. Roberts (Precision Engineering) Co. saw fitting in in terms of belonging to a small family firm where everybody had to pull his weight. Being able to accept the firm's discipline was a key indicator that one really fitted in. Work and social attitudes intertwined. The interviewee at G. Roberts said that whilst on the telephone with the Head of Binley Park School, he had emphasised that:

'People here have got to do as they're told. Not through authoritarian reasons, but if I say to someone: 'Will you do that ?' I want someone as is **willin'**, as much as I want someone that is capable. If I say: 'Put yer hand down the toilet', it's not because I'm makin' yer do it, but I want you t'be willin'...Because whatever the Employment Protection Act is this company comes before **anything**. We intend to see that the person'll fit in. We're a good team here, but one from outside that's no good could spoil it.' [Research Notes, employer's emphases]

Here, ability to fit in was bound up with work attitudes. Thus, accepting management discipline could also be construed as fitting in at some firms.

Problems with Those Not Having the Ability to Mix and who did Not Fit In

Employers mentioning this attribute commonly noted the problems caused by making a mistake and choosing an apprentice that did not fit in. Young people not fitting in invariably left. But, worse than that, according to Samuel Garfield Engineering, such apprentices, who were usually the type who would not have a laugh, and were not prepared to be the subject of mickey taking - in effect were not lads as described in Willis (1977) - were troublemakers. According to Samuel Garfield, (a small firm making jigs, tools and fixtures), an apprentice who did not fit in could cause trouble throughout the shop, for:

'...if people come in in the mornin' an' 'ad t' stare at a long face, somebody who looks miserable all the time'..[then it would cause a]... bad workin' atmosphere.' [Research Notes].

The morale of the shop would decline, production would suffer. The interviewee at Samuel Garfield noted that the same result was also created by those, (craftsmen as well as apprentices), that brought their problems to

work. Power Engineering Co. also said they did not want 'miserable sods'. Grippers, moaners and those whose leg refused to be pulled were not welcome at some of the small (mostly Non-MGTS) firms. Samuel Garfield noted that an apprentice could be brilliant technically, but if they did not fit in with the shopfloor banter then they would not last.

When training was largely on-the-job, ability to mix/fit in was viewed as essential for success. Unless apprentices fitted in and got on well with the workers in these firms they would learn little. In small patternmaking, machine and toolmaking shops, and where there was no MGTS involvement and off-the-job training, apprentices depended on skilled workers on the shopfloor for their training. If an apprentice did not mix well or fit in with the skilled workers then they would be rejected by them. Apprentices that were 'know-alls', too cheeky, or transgressed the norms and values of shopfloor culture by keeping themselves to themselves, would find progress in their training to be slow. The secrets of the trade would be withheld.

In Search of the Well-balanced

Johnson (1977) argued that industry needed balanced young people. Large firms in the CEES echoed this. A few of the large firms who looked for the ability to mix/fit in liked to see this exercised outside as well as inside working time. Anyone who was not sociable and did not like going out occasionally was viewed as being unbalanced by these firms:

'We look for a well-balanced lad, if possible. Uhm,..I think you're headin' for just as much trouble if you go for a lad that's continuous swot than as if you get a lad that's always going down on the snooker table.' [Acapulco Cars:Research Notes].

Being well-balanced was the key. These employers did not want apprentices who went out every night or were sociable at the expense of their work. Apprentices should enjoy their work and training, and their free time, but in moderation and not in ways or to the extent that their sociability seriously affected their own or others' work performances. Large employers mentioning ability to mix/fit in wanted a well rounded, well balanced

person, not a loner or someone who was the life and soul of the party.

It is at this juncture that the link between the ability to mix/fit in and having a pleasant personality becomes explicit. As the interviewee at Conquest International put it:

'They have to get on with people. That's one of the things about work - you've gotta get on with people.' [Research Notes].

According to Conquest, if a young person had a pleasant personality then getting on and mixing with people at work would be no problem. The existing workforce would naturally take to the youngster. But making such an explicit link between ability to mix/fit in and pleasant personality was rare. Such a link was generally implied or used as a background assumption when the employers expounded on these factors. A more common approach was:

'The most important thing is personality. He's got to have the personality that'll fit in with the people we've got here. Academic achievement's got to be behind that of course, but that's the most important.' [Amazon Engineering:Research Notes]

Here, in Amazon Engineering, an apprentice's personality had to fit in with the personalities of the existing workforce - but there was no explicit acknowledgement that it had to be pleasant. Indeed, sticking up for yourself and being tough in certain circumstances might be just as important as being pleasant. But the important thing was that the personalities of the existing workforce was the yardstick against which an applicant was judged, and these personalities could vary between firms, shops and sections.

Fitting in Too Well and Not Fitting in Well Enough

In certain circumstances young people could fit in too well. A few employers saw the danger of taking on young people who, like human chameleons, too readily blended in with certain individuals and groups within the shopfloor and drawing office cultures, taking on the norms of behaviour and values antithetical to profit-making and/or a capitalistic organisation of society. These workers were not pleasant.^[25] Minex summarised these fears:

'We've got the lot here, every colour, creed - the lot. Religious people, politicians - the lot. If you try and convert people that's when

you get trouble. I dare say there's political factions here we don't even know about - the 'leftish-socialist wing of the democratic united front!'. They're all here! Or at the University of Warwick!...[Laughs]...So, they're all here, and the young apprentices have got to cope with these people, they've gotta,..these young lads have gotta work with these people,...and..(we're looking for this), and not be indoctrinated by them, and become the image of the bloke they're working next to. They've got to accept and reject what commonsense dictates to them.' [Research Notes, employer's emphases].

Thus, apprentices had to use their commonsense, discretion and judgement regarding the extent to which they fitted in and with whom. Mixing with and adopting the values and behaviour of politicians was undesirable. But the CEES employers, (especially small firms, particularly patternmaking shops), did not want apprentices to emulate workers with bad working habits either - however right-wing they were. Employers in patternmaking firms and small toolmaking and machine shops, (where they had knowledge of the personality of individual workers), sometimes tried to steer a lad away from those with bad working habits and issued warnings to apprentices to follow the example of good workers.

Where possible, workers with bad working habits were excluded from the training of apprentices. Medium-sized and large employers tended to place more emphasis on the commonsense of the apprentices they recruited winning through against either attempts at indoctrination or apprentices being unduly influenced by 'bad' workers. On the latter point, medium-sized firms, small group A-B MGTS firms, and especially large firms with training schools, were not so concerned about this as were those small firms where training was exclusively on-the-job. With more professional trainers, hand-picked and trained workers who had special responsibilities for apprentice training, and off-the-job training, the apprentice was probably more immune to coming under the influence of workers with bad working habits - at least in the first 1-2 years of the apprenticeship. When actual shopfloor and drawing office work began to take a significant proportion of the apprentices' working time from the second year onwards these employers hoped that the work disciplines already learnt in training would be maintained. On withstanding the influence of politicians and union militants it was hoped that the apprentices' commonsense would lead them to reject their arguments.

Thus, some of the medium-sized and large firms wanted their apprentices and applicants for apprenticeship to possess 'spirit', or 'fire in the belly' as Carbitool Ltd. graphically put it. They wanted people who would argue back against militants and politicians. Of course, Carbitool were aware that this might mean recruiting apprentices who would sometimes answer back to supervisors as well - but according to Carbitool, people rising from the shopfloor to management level had displayed this characteristic whilst apprentices. The secret was not to recruit too many of this type given limited management openings.

Appearance and Fitting In

It was argued earlier that appearance was essentially an indicator of a young applicant's attitude to work. However, the qualitative data on ability to mix/fit in shows that appearance played a further role in the recruitment of engineering apprentices. While it may still generally hold true that employers in my CEES were not looking for well-dressed young people per se, they might have to take into account the effect an applicant's personal appearance would have on the workers the lad would be working with. For example, at Casablanca Cars it was stressed that it was important that technician applicants were moderately dressed, not because it was important for the interviewee, but that a scruffily dressed young person would not fit in with the drawing office staff. Older technicians would resent it. If particular workers did not like punks or skinheads then this might ultimately come to affect attributes sought in recruitment.

Ability to Mix/Fit in: Craft and Technician

Although there was very little difference in the proportion of craft-training and technician-training firms that referred to this attribute, it did have greater significance for technician recruitment. For example, although Minex Communication mentioned the factor for both craft and technician, it became clear that much more weight was placed on the factor

when technicians were being recruited. Minex pointed out that for those who could not mix, it was a problem - but more so for technicians. The interviewee at Minex gave a lengthy account of a lad who was quiet and inward-looking but who had nevertheless coped with being a craft apprentice - even though he was subject to a lot of mickey-taking on the shopfloor. He went on to explain that under no circumstances would the same lad have been considered for a mechanical technician's apprenticeship. Technicians needed to be more outgoing. For a craft apprentice at Minex the young person had to fit in with the shopfloor culture, but the ability to mix/fit was more closely connected with the technician's actual role in the labour process than with a wider shopfloor or drawing-office culture.

Minex summarised the technician's role in the following way: the technician has to pass on, interpret, and occasionally operationalise, technical information pertaining to particular projects on the shopfloor, and also inform management and particular specialists of technical problems encountered, and make a contribution towards solving these problems. Information was the key word for Minex, for technicians:

'...have got to get information from all levels of management, down on to the shopfloor, and they've got to get information from people and pass it on. That is probably 90% of these persons' jobs.' [Research Notes].

Stubbs (1980) highlighted findings from EITB research which showed that the communication of technical information (in drawings, reports, orally) was the most important function of the technician's role in terms of time spent on it. In the process of passing on technical information the ability to mix with various levels of people - from the craftsman to the senior manager - was particularly crucial. Minex technician recruiters therefore placed a premium on applicants who could mix.

On the other hand, technician recruiters did not want apprentices whose over-confidence was construed as arrogance by the shopfloor. Again, such individuals would find it difficult to mix with significant others in the labour process. For example, at United Industrial Fasteners, the interviewee explained that:

'We have a lot of special purpose machinery - which we designed ourself, and we look for co-operation in this type of work. There's usually an antagonism between the pair of 'em, (craft and technician). They're not too bad really, but we wouldn't wanna guy come in who thinks, (or maybe has the attitude when he's finished 'is trainin')...or isn't all that keen on associating with the craftsmen on the shopfloor,.. 'cos you need that relationship there. 'E's gotta get on wi' people and not think to himself that a technicians' job is about three feet taller than anybody else's. But that's the sort of thing he'll be taught as 'e goes.' [Research Notes, employer's emphases].

Gorz (1976a) argued that technicians were 'the workers most immediate enemy.' (p.175). But the United Industrial Fasteners interviewee did not wish his craftsmen to think this way. Technicians had to be able to mix well with management and shopfloor, and to be outgoing, certainly not shy, but not arrogant either.

This chapter has thrown up many detailed points and conclusions, but the most important general argument was that employers appeared to keep their labour processes in view when they specified attributes such as interest in engineering. As we saw, they had quite specific reasons (in terms of the organisation of their labour processes and their particular form of socially producing labour power) for seeking general attributes which appeared to relate to the engineering sector as a whole. They also kept their labour processes in view when they looked for ability to mix/fit in. Mistakes here would lower the co-operative dimension of the labour force, lowering morale and production. It was also argued that engineering employers were concerned that general work attitudes were not good enough, but that there was little evidence that they had declined. The Concern Theory (Chapter Six) gained no support. The real problem was with specific engineering-oriented work attitudes. As we shall see, there was a real crisis of interest in engineering amongst school leavers in Coventry. Chapter Twelve analyses this point in greater detail. Chapter Nine is basically a continuation of this Chapter, as it looks at one of the most important classes of attributes sought in detail - qualifications. It was noted in this Chapter that some employers, such as Bird Panels, argued that work attitudes were more important than qualifications. This is one of the themes taken up in the next chapter.

Chapter NineQUALIFICATIONS AND EDUCATION EFFECTS(i) Introduction

In this chapter it is argued that qualifications, from the point of view of capital, are basically measures, indicators or proxies (OECD:1977a) for learned skills pertinent to the labour process. It is argued that they are imperfect indicators and measures for a number of reasons. In practice, recruiters of youth have reservations about them insofar as they believe that qualifications only generally and loosely relate to their labour processes. Furthermore, it is argued that qualifications also indicate and measure other attributes, especially personality traits and work attitudes.

Section (ii) examines the nature of qualifications. Section (iii) examines overacademicism, defined as where employers recruit young people who have learned skills not utilised in the labour process. It is argued that overacademicism originates within the effort bargain struck in the social production of labour power. It manifests itself in the labour market as some workers entering certain jobs perceive that the original effort put into their general education, and resulting in certain qualifications, was not worthwhile. It becomes a problem for the employer in the labour process where the frustration and boredom of the labourer reveals itself.

In Section (iv), it is argued that the rift between schooling and work within the context of the further development of labour power creates what are called 'education effects'. Here, recruiters take into account that academic attributes manifested through qualifications are a consideration for the further development of labour power through the apprenticeship system. Individual capitals have little control over aspects of this further social production of labour power, hence they are forced, sometimes against their will, to recruit with the institutions of further education and the MGTS in view. The attributes sought do not just flow from the labour process. Education effects are most clearly manifested in the fact that the

qualifications criteria of colleges enter into the criteria of recruitment. This occurs especially with technician recruiters where qualifications were stipulated for entry to level two of the TEC course.

Section (v) examines data on qualifications demanded by CEES employers. The relation between qualifications demanded and actual qualifications is surveyed using the Apprentices' Records. In total, it is revealed that only 47% obtained qualifications which met both the employer's and MGTS criteria. Why were so many 'failures' employed? A number of preliminary propositions and hypotheses are outlined based on the previous discussion. These are taken up in Part Four.

(ii) Employers and Qualifications

Academic qualifications in themselves are just bits of paper. The important question is what they signify for employers. Hohn (1988) has argued that they do not signify much for those trying to understand the recruitment process, for the term qualification covers:

'...so many characteristics of the applicant that it becomes vague, ambiguous and almost useless for an analysis of the recruitment process.' (p.83).

It has been argued that employers believe that certificates are vague in that they do not readily relate to occupational functions (OECD:1977a). On the other hand, the Revolutionary Marxist Tendency (1981b) assert that qualifications allow the capitalist to select people with the requisite skills. Ashton, Maguire and Spilsbury (1987) note that educational qualifications are:

'...one of the few forms of apparently objective criteria available to employers in selecting school-leavers.' (p.169).

In between these two extremes Wood and Manwaring (1988) argue that employers realise that qualifications and exams are inadequate measures of capabilities, and that not everyone can afford to stay on at school, but nevertheless use them as a guide to the acquisition of basic skills of literacy and numeracy through specifying levels of qualification (CSE/GCE -

A/O) rather than pedantically setting specified grades and subjects. The position taken here tends to follow the the third line, but with some important differences.

Lynch (1979) notes that the crucial point for employers is not what bits of paper the applicant has, but what he can do. Building on this, it can be maintained that qualifications are basically indicators and measures of learned skills. They are indicators in the sense that they tell the employer, given the syllabus, roughly what the applicants should have learnt in terms of crucial learned numeracy, literacy and other skills. They are measures of these skills as the grade of the final exams and assessment tells the employer roughly how good the applicants are in the skills tested. In practice things are messier, and this general view needs qualification.

First, Baird (1981) has shown, in a study of 150 employers in the Manchester area, that employers were not even familiar with the exam system, especially the difference between CSE and GCE. Thus, their knowledge of syllabuses is likely to be hazier. The connection between qualifications and the labour process is filtered through the haze of employer ignorance.

Secondly, a number of researchers and commentators have noted that for employers, qualifications indicate attributes in applicants other than learned skills. Employers may use qualifications to assess work attitudes (Harris:1982; Cuming:1983), personality traits (Berg:1973; Harris:1982; Finn and Markall:1981b; Cuming:1983), general abilities such as intelligence and the ability to learn (OECD:1977b; Cuming:1983) and the ability to undertake training and hence lower training costs (OECD:1977b). Cuming (1983) asked the employers in his study what personal characteristics were indicated by qualifications. Out of 106 employers, fourteen mentioned 'diligence', (mentioned most times) ten 'the type of person indicated through the subjects studied' and eight 'application'. Perusal of the total results, (Cuming:1983,p.45), shows that personality traits and work attitudes were to the fore. Such facts may have led Hohn (1988) to conclude that qualification was a vague concept in employer's consciousness. In fact, it shows a more subtle use of qualifications. Cuming also found that 53% of his sample

believed that qualifications of applicants did not cater for the specific literacy and numeracy skills they demanded, and 44% said they did. However, the significance of this remains in doubt given Baird's (1981) findings on the ignorance of employers regarding qualifications. Indeed, Cuming himself found that few employers could be specific about the literacy and numeracy skills they felt were lacking in applicants, and Chapter Ten shows similar findings in relation to the CEES on numeracy.

Thirdly, qualifications are often in fact a 'nebulous category' (Frith and Buckley:1978). Young people are often recruited before the results are known (Reid:1980; Finn and Markall:1981b). This provides a rationale for the widespread use of employers' tests (Reid:1980; Lee, Marsden, Hardey, Rickman and Masters:1987). It also shows why the particular level of course an applicant follows can be seen to be more important than specific grades; at least the former is known. In the CEES context, for most employers, even for technician recruitment, certain qualifications were desirable rather than essential. The upheaval caused by rejecting young people who had been offered apprenticeships because they had failed to get stipulated qualifications could be tremendous in larger firms taking on over fifty apprentices a year. Employers would be faced with re-advertising vacancies, dealing with disappointed young people and their parents and incurring extra costs of recruitment and time when staff resources were getting ever slimmer in the early 1980s. Furthermore, the period between the publication of exam results and enrolment for TEC and City & Guilds courses was short, making wholesale rejection of qualifications failures even more unlikely. A handful of large firms did this, only for technicians and only where exam results were very poor. Only Transco re-advertised for craft vacancies if they could not be filled by technician recruits who had inadequate exam results.

These points show that in practice qualifications measure and indicate learned skills for employers in a very mediated way. Their use as indicators and measures must be set against employers' ignorance of the nature of qualifications and exams and the skills they test, vagueness about the skills they fail to measure and indicate, the fact that qualifications measure and indicate other labour power attributes, and the fact that they

are often unavailable. With the looseness of the relation between qualifications and jobs (Oxenham:1984), low labour demand from the mid-1970s and especially in the early 1980s where qualifications lost their market value (Windolf:1988a), and the increase in the proportion of school leavers with qualifications since the Second World War (Wright:1977; Simon:1984; Sofer:1988), overacademicism is exacerbated. Section (iii) examines the general definition and conditions of this phenomena.

(iii) Learned Skills, Qualifications and the Labour Process

In Chapter Six it was argued that there was a general tendency for capital to attempt to raise the quality of labour power through developing its attributes and to recruit labour power with the most developed attributes. This general tendency is counteracted in practice by other considerations. First, there are contradictions within the general process of the social production of labour power, which would require a further thesis to develop and which are not immediately relevant here. Secondly, there are considerations resulting from the fact the social production of labour power is regulated by the labour process. This affects learned skills.

From the capitalist point of view it is wasteful of capital to develop learned skills within labour power that will not be utilised within the labour process. But in the concrete production of labour power through general education in modern societies, capitalists have no direct control over the social production of learned skills which will become labour power attributes. This takes place in schools beyond their control. Moreover, within schooling the future workers strike up the effort bargain within the first element of the social production of labour power; general education. Simply, teachers aim to develop learned skills within pupils who identify and yield to the process insofar as they believe they will gain by it through qualifications and eventual jobs (Willis:1987). As was argued earlier, potential labourers have a real interest in developing their labour power as it aids employment chances, job mobility, choice and pay. When they make a significant effort to develop their own labour power in schooling,

which results in attaining qualifications, pupils expect rewards in the labour market for this effort. Gorz argues that qualifications become identified with a 'right' to privilege in the labour market amongst those who hold them (1976a,p.178). Thus, when pupils enter jobs deemed by themselves as not being consummate with the effort they put into schooling, and with their qualifications, (in terms of a combination of the attributes, especially learned skills not being utilised, working conditions, status of the work, pay and accoutrements of the job), then frustration, boredom and resentment are possible. The worker is unwilling to subsume his superior labour power to a menial task; too much general education makes the labourer 'unfit' for menial work (Gorz:1976a,p.191).

The employer is caught between taking on youth with relatively developed learned skills indicated by qualifications and going over the top in this sphere and risking alienating the subjective aspect of the labourer's labour power. This becomes more likely in a situation where the employer does not control or finance general education and hence the regulation of learned skills and other labour power attributes by the labour process is weak or virtually non-existent. This dilemma was exposed in the CEES.

Zargon Engineering Ltd. summarised this problem most succinctly:

'I'm not lookin' for the brightest, as I say. I want them to be a little bit bright, but I'm not looking for an academic ability beyond the type of work that I want them to do.' [Research Notes].

G.A Melton Ltd. pointed out that they were not looking for 'whizz kids', and if a lad turned up with 'A' levels or Higher or Ordinary National Certificate (HNC/ONC) he might be found a job on the development side, as:

'He would probably be too useful to us here...he'd have too much academic knowledge, and he'd be bored - it wouldn't be fair to the lad.' [Research Notes, employer's emphasis].

G.A. Melton did not turn down lads with good 'O' levels: 'But the majority of lads that come to us are the sort of CSE level.' [Research Notes]. Some put the problem in cruder terms:

'We don't want people who are too bright to work in the shit out

there.'[A.H. Harper (Fabrications) Ltd.:Research Notes].

It was not just the case that over-qualified young people got bored and objected to working in shit, leading to problems of supervision, but they invariably failed to stick at it and tended to leave. The AUEW National Committee discussed the problem of craft apprentices with 'O' levels leaving their apprenticeships, and concluded that: '...craftsmanship and education don't necessarily go together.'(AUEW:1971). The problem was most acute in small and medium firms. In larger firms there was more space for moving young people from craft to technician or even commercial or student apprenticeships and opportunities for future promotion. Overacademicism may also be exacerbated by education effects.

(iv) Education Effects

In modern Britain, the recruitment process comes not prior to, but in the middle of, the social production of labour power, when the bulk of general education has been completed but before practical education and training and the development of abilities in production takes place. Recruitment comes in the middle of a fragmented social process. For relatively complex labour power, where further practical education and training forms a significant element, the employers in this situation may have to take the processes involved in the further development of labour power into account, the more so when they do not control some of this process. They may incorporate into the attributes sought in applicants in recruitment 'education effects', the attributes deemed relevant to the further production of labour power. In conventional terms, they may recruit not just on their needs, but also with reference to the needs of education and training organisations involved in developing labour power further; further education colleges and MGTS being the main ones in the CEES.

Those CEES employers who looked for 'O' level candidates for technicians believed that such young people had the learning habit which would prove useful for training and college work. They were less likely to struggle with

the maths and physics involved in college courses, for:

'...even if he's got a bad 'O' level,..[in maths]..at least he's done it. With a CSE he hasn't even done it...[the Maths required for TEC courses:GR].' [Court (Manufacturing) Co. on technician recruitment: Research Notes].

Those stipulating 'O' level only candidates occasionally acknowledged that they went 'over the top' on qualifications. But they argued that they were not to blame; they did it to satisfy 'the colleges'. Midland Aero Components from the Pilot Study illustrated this point forcibly:

'...qualifications are unnecessary. Qualifications are there purely and simply to satisfy your academic friends.'[Research Notes,Pilot Study].

This example poses the point that when employers said that they were looking for certain qualifications when recruiting engineering apprentices was this because they themselves were looking for them, as they believed them to be essential, or was it because the colleges were demanding them? Unfortunately, my research did not separate out these possibilities; neither did other studies researching into employers 'needs'. The extent of education effects remains hidden.

Midland Aero Products suggested that colleges of further education forced employers into the clutch of overacademicism with their demands. It was a problem created by the colleges, and employers had to deal with its consequences as apprentices with 'too many qualifications'(Midland Aero) became disenchanted as their training progressed.

Some writers have referred to 'qualification inflation', (Dore and Oxenham:1984; Oxenham:1984), which can in itself lead to overacademicism. Qualification inflation refers to a general upward trend in qualifications demanded by employers. If technology and the organisation of the labour process remain constant yet the qualifications demanded increase, then the problem of overacademicism increases - the gap between the academic qualifications gained and their actual use in the labour process widens. Yet, if the introduction of new technology and related labour reorganisation resulted in the greater need for academic qualifications and the actual use of 'academic' skills then, if the qualifications demanded remained the same,

the problem of overacademicism would become less salient.

When there is an over-supply of labour leading to greater choice of potential employees for employers, then employers can afford to boost the qualifications required. In the CEES, D. Clarke (Engineers) Ltd. summarised the argument in the following way:

'...it's different for technicians, because they've got to have acceptable qualifications to take the TEC,..but for craft, qualifications aren't so important. But then again, when there's over-supply, even for craft, ya can set yer qualifications even higher, and if two kids are the same, except that one's got higher qualifications then that's gonna be it.' [Research Notes, employer's emphasis].

The temptation to recruit to higher qualifications is always present. Coventry's Youth Employment Committee noted the same trend in the late 1950s when the supply of young workers in the local labour market started to rise (CCS:1958,1959). In a variety of ways then, conditions in the local youth labour market and education effects resulting from real or apparent demands of the colleges or the MGTS can exacerbate overacademicism.

(v) Stipulated and Actual Qualifications

Let us now turn to the qualifications demanded by CEES firms. The results have been analysed for craft and technician, and broken down into: the subjects required; the number of subjects required; and the level of grades required. Tables 9.1/3 illustrate these findings. The surprising thing about Table 9.1 is the number of firms not looking for any qualifications. Craft recruiters gave more prominence to practical subjects than technician recruiters, (excepting technical drawing). Technician recruiters were more concerned with academic subjects. Even so, mathematics and English were the two most important subjects for craft, and the mental/manual division of labour did not clearly manifest itself in any clear-cut way in Table 9.1.

The difference between craft and technician on the number of subjects required was not substantial either; the modal number of subjects was 2 for craft and 3 for technician - see Table 9.2. The gap between the two was widest on grades. Table 9.3 illustrates this. CSE grades were sufficient

for just over two fifths of craft recruiters, yet an almost identical proportion looked for some combination of CSE and 'O' level grades for Technicians. Furthermore, nearly a third of technician recruiters demanded 'O' level grades only, and few were content with CSE-only grades. Conversely, craft recruiters were not too keen on 'O' levels. Small firms in particular avoided 'the bright 'O' level lad' for craft. There was a certain scepticism about applicants with high qualifications. This invariably meant 'O' level applicants. It was not only that lads with high qualifications got bored because they were not being intellectually stimulated or that they felt they deserved something better. There were influences outside the work place that could slowly grind down initial enthusiasm. The technical colleges were blamed by Bird Panels:

'At one time, a few years ago, I was looking at people with 'O' levels an' so on, and you could get 'em. But then I found that too many 'O' levels wasn't conducive. The technical colleges went against yer. They'd turn round to the lad an' say: 'You're too good for Bird Panels.' An' 'e'd come back an' tell me, an' immediately 'e'd stop tryin'.' [Research Notes].

The idea that 'O' levels were not required for craftsmen was common amongst small group A-B firms, especially amongst sheetmetal firms. As Fairfax Engineering put it: '..as far as I'm concerned I'm trainin' craftsmen...not mathematicians.' [Research Notes]. Many similar comments could be found amongst small firms. These small firms were often less able to offer the promotion and career development possible within the large group D-E firms - another cause of dissatisfaction amongst those recruits with high qualifications. The important thing for the small firms who were sceptical about the value of qualifications was that those taken on must be 'triers'. This sometimes extended to achievement at school:

'I want one that's tried. He must 'ave tried at school. I don't say 'e's gotta be brilliant - 'e 'asn't.' [A.R. Duff (Engineering): Research Notes, employer's emphasis].

Even where projected and actual examination grades were poor, this did not matter as long as they had done their best. Anyhow, as Vortex Patterns noted, they would get a second chance as they would do maths and technical drawing at technical college during their apprenticeship.

Table 9.1 : SUBJECTS REQUIRED - CRAFT AND TECHNICIAN

SUBJECTS REQUIRED	CRAFT recruiting firms		TECH. recruiting firms	
	(1) No. of firms requiring the subject	(2) % of firms requiring the subject (n=105)	(3) No. of firms requiring the subject	(4) % of firms requiring the subject (n=52)
ART	0	0	1	2
CHEMISTRY	1	1	0	0
DESIGN	2	2	0	0
ENGLISH	29	28	31	60
MATHEMATICS	67	64	42	81
METALWORK	27	26	1	2
PHYSICS	10	10	21	40
SCIENCE	7	7	7	13
TECHNICAL DRAWING	28	27	19	37
WOODWORK	13	12	0	0
OTHER (UNSPECIFIED)	5	5	9	17
NO PARTICULAR SUBJECT	1	1	1	2
DON'T KNOW	0	0	1	2
<hr/>				
NO QUALIFICATIONS	32	30	7	13

*Where firms specified, for example, 'Metalwork or Woodwork' both were counted as either would satisfy requirements.

A few firms - mainly medium and large firms - echoed Frith and Buckley's (1978) point noted earlier; it was no use relying on qualifications as by the time they had exam results the lads had already been recruited. This was why some of the larger firms relied so much on their tests, with nothing: '...criteria-wise, on the desk.' [Orion Products: Research Notes]. For these firms, qualifications were only:

'...an indication...I mean, when 'e does an assessment test, at the company, if 'e gets good marks in the assessment test,..I mean you've gotta base yer judgement on that. As I say...it's no use relying on the qualifications 'cos by when they've got the results they've already

started the job.' [Bell Components:Research Notes,employer's emphases].

Orion Products saw the test scores as suggesting that applicants were likely to get certain qualifications; as predictors. A few group E firms argued, even for craft, that qualifications were important as they showed an ability to learn. This did not always relate solely to their ability to do well on college courses. The level of technology could be important:

'...the college doesn't ask for these qualifications... All the college asks for is a 'good secondary education'. But because the machines we use tend to have a fairly high school content we tend to go for lads that are more qualified than er, they need to be in terms of good grades getting them a good start at the college.' [V. Broughton (Machine Tools):Research Notes,employer's emphasis].

Here, education effects and the nature of the labour process combine to set the considerations on learned skills and qualifications. V. Broughton makes the relation between the relatively 'high school content', the learned skills required in the labour process, and qualifications as a measure and indicator of learned skills, explicit.

Table 9.2 : PERCENTAGE OF FIRMS REQUIRING NUMBER OF SUBJECTS - CRAFT AND TECHNICIAN^a

NUMBER OF SUBJECTS> REQUIRED	1	2	3	4	5	6	Unspec- ified No.	Don't Know	None/ No Quals.
% of CRAFT Firms Requiring.. (n=105)	12	31	13	10	1	0	1	0	30
% of TECH. Firms Requiring.. (n=53) ^b	6	15	32	28	2	2	0	2	13

- Notes: a- Where employers said 'Metalwork or Woodwork' only one subject was counted.
b- 53 due to Minex giving different requirements for Mechanical and Telecommunications Technicians.

Meadowcroft Tools was one of the few craft recruiters who looked for 'O' level-only applicants. This was justified on the basis that '...it shows their ability to learn' in general as well as at college. There was also the general view that standards for CSE were set too low. A few criticised how it was assessed, referring to CSE Mode III courses, not realising that Mode III assessment was not peculiar to CSE. The most negative comments on CSE made by CEES employers came from small group A-B firms. Coventry Education Committee seemed to be aware of these employers' criticisms and proposed various measures in the Autumn of 1978 to counter them (Coventry Education Committee:1978b,EC.11). Small toolmaking firms were most anti-CSE. These firms aimed at producing multi-skilled craftsmen with the ability to work on high-precision products. But even amongst small toolmaking firms there was dissension on this point, and in general there was a wide variation amongst sample firms as to the value of qualifications for craft apprentices.

Group D-E firms argued that qualifications were important for craft in terms of promotion. If apprentices had ambitions to be foremen then qualifications would prove useful. In Carbitool Ltd., for example, there was a tradition of maintenance apprentices going on to be foremen. These firms also pointed out that craft apprentices with good qualifications were more flexible as they could always move up to technician level at an early stage of their apprenticeship if an opportunity arose. The line between craft and technician in the large firms was a thin one. Imperial Carriers were looking for a new breed of supercraftsmen to complement their CNC investments, and Morton James Precision made no distinction between craft and technician until the third year. Many MGTS firms sent their better-qualified craft apprentices on TEC courses (Apprentices' Records) as it gave them the opportunity to move up to technician if required, kept alive their ambition and interest to a greater extent and made them more flexible.

On specific subjects for craft, the three that resulted in most discussion were maths, English and metalwork. On maths there was continual emphasis on how important it was, especially in terms of converting Imperial to metric measurements and vice versa. The small firms who only specified one subject invariably specified maths: 'Because maths is the only thing they really

Table 9.3 : GRADES REQUIRED - CRAFT AND TECHNICIAN

GRADES>	CSE only	CSE/ 'O' level	'O' level only	O/A level	Just have to have taken course - pass or fail not important	Don't know	None/ No Quals
% of CRAFT Firms asking for.. (n=105)	41	19	9	0	1	0	30
% of TECH. Firms asking for.. (n=53)*	9	42	32	2	0	2	13

*53 as Minex gave different grades for mechanical and telecommunications technicians.

need.'[Metal Precision:Research Notes]. When English was mentioned it was usually in the context of writing log books and work for college. Metalwork generated the most discussion. The two main themes were that school metalwork was almost useless (sometimes it was seen as harmful), and it indicated an interest in engineering. The scorn poured on school metalwork was intense. For technicians there was often parallel criticism of technical drawing at school. Whenever T.D. was mentioned for technicians it was usually in terms of indicating an interest in engineering in general and technicians' work in particular. It played a similar role in recruitment to metalwork for craft. The basic point was that for both Metalwork and T.D.:

'...the classroom skills, (apart from a basic skill), isn't important to us. We're willing to train 'em.'[Tudor Panels:Research Notes, on technician recruitment, employer's emphasis].

The CEES firms saw it as their role to train in the practical skills. This was to ensure the correct skills and attributes were developed.

Technician recruiters noted that it was different for technicians as they had to get acceptable qualifications to take the TEC. The problem was to

recruit applicants who were going to get these qualifications. The tests helped on this. Once offers were made they were usually honoured, except at Transco, (where demotion to craft might occur), or where exam results were very poor. It was not usually a problem if recruitment was thoroughly carried out. As Conquest International noted:

'In general, if we make an offer to a sixteen year old school leaver,..we honour that offer. If they should fail all their subjects then we should turn round and say, 'Sorry you haven't met the criteria'. But they don't fail all their subjects...their personality, that we've looked at, during the interview, indicates that they're gonna pass most of them.' [Research Notes, on technician recruitment, employer's emphases].

Thus, if recruitment methods were sound and procedures kept to then typically technician applicants who were likely to get acceptable grades would emerge. The problem was, as we shall see in Part Four, these conditions were not always adhered to.

Qualifications: Demanded and Actual

Access to the Apprentices' Records of the MGTS intake for the 1980/1981 training year enabled comparison of the qualifications demanded with the actual qualifications obtained. This was done in two ways. First, for those apprentices whose firms I visited, I could compare the qualifications stipulated by their respective firms with the qualifications entered in the Apprentices' Records. Secondly, I could compare the latter with the qualifications stipulated by MGTS - (English, maths plus two Others at CSE 2-4 for craft, and physics, maths and English plus one Other at CSE or 'O' level for technician). From those apprentices whose firms I had visited I could also determine the proportion who had satisfied the qualification requirements of both the firm and MGTS.

a) Focus on the Firm

There were 84 apprentices in the Apprentices' Records study whose firms were also visited in the CEES; 63 craft apprentices and 21 technicians. The data

for these 84 apprentices was analysed in the following way. First, I looked at whether the various subjects demanded by employers for craft and technician applicants were taken as examination subjects, (at either CSE, 'O' or 'A' level), by the apprentices they had recruited. Secondly, I examined the grades stipulated by the employers to see if they had been attained by the apprentices they had recruited. Putting these two sets of data together I could then ascertain those that had both the required grades and had taken the required subjects.

The first of these calculations revealed that of the 63 craft apprentices, 34 (54%), had taken all the subjects stipulated by their firms at either CSE or GCE. A further eleven craft apprentices (17%) were in firms where no qualifications were required. This left 18 (29%) craft apprentices who had failed to take one or more subjects at CSE or GCE that were sought by their firms. Of the 21 technician apprentices, 18 (86%) had taken all the subjects stipulated by their firms, leaving only 3 (14%) who had failed to take one or more subjects sought by their firms.

The second set of calculations, pertaining to grades, showed that for craft apprentices 39 out of 52 (excluding the eleven where no qualifications were required), exactly three-quarters, attained the required grades. Including the eleven who were in firms requiring no qualifications then 50 out of 63 (79%), obtained the minimum grades. The finding that more obtained the required grades than took the appropriate subjects should come as no surprise. If a craft apprentice had to take maths, English and metalwork yet was not doing one of these subjects then he could only, at the most, get the required grades on two of these. The result that more apprentices obtained the correct grades than took the right subjects follows from the fact that, *ceteris paribus*, it is easier to get the appropriate grades in two subjects rather than three. For technicians, 17 out of the 21 (81%), obtained required grades.

One advantage of separating out subjects and grades is that it allows conclusions to be drawn about precisely where employers were having difficulties in attracting young people with the right qualifications. Table

9.4 illustrates subjects that the apprentices had failed in (by their firms' criteria) in terms of: a) whether they had taken them, and b) whether they had obtained high enough grades in each subject. The first column shows the number of apprentices who had not taken a particular subject that was demanded by their firms. Thus, nine craft apprentices had not taken technical drawing yet their firms had stipulated T.D. in craft recruitment. The practical subjects, metalwork and T.D. were clearly the most problematic for craft recruiters. For metalwork/woodwork, the apprentices were required to have taken either.

The second column in Table 9.4 examines instances where apprentices had taken the subject required but failed to reach the required grade. For example, eight craft apprentices had taken Maths and did not get good enough grades in it on their firms' criteria. Maths was not a problem in terms of employers taking on apprentices who had not taken it, but it was in terms of employers finding young people with a sufficiently high grade in it - on their own criteria. The technicians' data shows that employers were managing to find the young people they wanted with the higher grades required. However, the data may also reflect the fact that many firms noted that CSE grades 2+ were essential for TEC entry, whereas for craft there were no essential college requirements.

It should be noted in relation to the interpretation of the columns on grades that one apprentice could have failed to achieve the required grade in more than one subject stipulated by his firm. The worst case of failure on the firms' criteria for craft was apprentice No.103, recruited by Bird Panels. For a craft apprenticeship, Bird looked for maths, technical drawing and metalwork at CSE grade 3+. Yet No.103 had been recruited without having taken technical drawing or metalwork and having taken maths but failed to get the required grade. The worst case of technician failure was No.47, employed by Carbitool Ltd.. Technicians at Carbitool ideally had to have technical drawing, maths, physics and English at CSE 2+/'0' level. However, No.47 had not taken physics or technical drawing. He had taken English and maths but failed to reach a CSE grade 2. This was the most dramatic case of failure of all.

Table 9.4 : THOSE FAILING TO MEET THE ACADEMIC QUALIFICATION REQUIREMENTS OF THEIR FIRMS : BY SUBJECT FAILED - CRAFT AND TECHNICIAN APPRENTICES AT MGTS FOR THE TRAINING YEAR 1980/1981

SUBJECTS	No. of apprentices who had not taken X when it was demanded by their firm		No. of apprentices who had taken X but had not achieved the required grade		No. of apprentices who had either not taken X or not achieved the required grade	
	CRAFT	TECH.	CRAFT	TECH.	CRAFT	TECH.
CHEMISTRY	0	0	1	0	1	0
ENGLISH	0	0	1	2	1	2
MATHS	2	0	8	2	10	2
METALWORK	8	0	2	0	10	0
METAL/WOODWORK	1	0	1	0	2	0
PHYSICS	1	2	0	0	1	2
TECH. DRAWING	9	2	4	2	13	4

Table 9.4 tells us nothing about the proportion who were failing particular subjects demanded by their employers. Table 9.5 remedies this situation by examining the percentage failing one of the 'Big Five' subjects - those demanded most commonly - maths, English, physics, technical drawing and metalwork. Tables 9.4/5 exclude the eleven craft apprentices who were in firms which demanded 'No Qualifications' for craft, for obvious reasons - 'failure' was impossible. Hence, the data in 9.4/5 refers to 52 craft and 21 technician apprentices.

In Table 9.5 the vertical column A shows the percentage who did not do required subjects. The high 50% for craft on physics is unimportant as it pertained to only one out of two craft apprentices whose firms' demanded physics for craft. However, the data for T.D. and metalwork appears to be worrying from an employers' perspective. Just over a third of craft apprentices who were required to take T.D. had not taken any examination in it at all, and nearly a fifth of the technicians had not taken it when it was required - probably an even more worrying statistic. Nearly two-fifths

of the craft apprentices whose firms' had stipulated metalwork had not taken it at either CSE or 'O' level.

The vertical column B shows the proportion who had taken a required subject but had failed to obtain the required grade in it according to their firms' criteria. The worst finding from the employers' perspective was that nearly a fifth of the technicians who were required to get a certain grade in T.D. had taken it but failed to get the right grade. On the whole though, both craft and technicians were failing to get the right qualifications largely because they had not taken certain subjects in the first place - not because they had taken them and got poor grades on their employers' criteria.

Column C shows the cumulative failure rate; it includes those who had not taken a certain subject and those who had taken it but failed to get the required grade in it. The results show that when engineering employers in Coventry talked of apprentices not getting sufficient qualifications, their usual criticisms - that they were not doing well in the academic subjects - seem misplaced. Certainly, the fact that 21% of craft apprentices who were required to get maths at a certain grade by their firms, but either did not take it or failed to get the grade, might be cause for concern. A fifth of the craft apprentices taken on by their firms were underqualified in maths. This pales into significance in comparison with the failure rate in the practical subjects; technical drawing and metalwork. Exactly a half of the 26 craft apprentices who were required to get T.D. at a certain grade had failed to achieve it. This was mostly due to not taking it in the first place. Almost a third of the technicians had failed to get high enough qualifications in T.D.. Nearly a half of the 21 craft apprentices who were required to get metalwork at a certain grade had failed to do so. Again, the main reason for this had been failure to take it. Overall, (excluding the 11 whose firms did not require qualifications for craft), just over two-fifths (44%), had failed to meet their employers' requirements on qualifications - in terms of either subjects demanded or grades required. For craft apprentices, just over a half (54%) had failed to meet their employers' requirements, either on subjects or grades. Nearly a fifth (19%), of the technicians had failed to reach the level of qualifications demanded by

their employers in some respect.

Table 9.5 : PROPORTION OF APPRENTICES WHO FAILED IN MATHS, ENGLISH, PHYSICS, TECHNICAL DRAWING AND METALWORK ACCORDING TO THEIR EMPLOYERS' CRITERIA

SUBJECT/ Craft and Technician	No. of Craft and Tech. apprentices requiring a particular subject	A: % of apprentices whose firm demanded X but did not do it	B: % of apprentices who did X but did not get a high enough grade	C: (A+B) Either did not do X, or did not get high enough grade
MATHEMATICS				
Craft	47	4	17	21
Technician	20	0	10	10
ENGLISH				
Craft	16	0	6	6
Technician	18	0	11	11
PHYSICS				
Craft	2	50	0	50
Technician	7	29	0	29
TECHNICAL DRAWING				
Craft	26	35	15	50
Technician	11	18	18	36
METALWORK				
Craft	21	38	10	48
Technician	0	N/A	N/A	N/A

Note: n= changes with each item; Table 9.4 gives the numbers required.

b) Focus on MGTS

As well as the firms' criteria, recruits also had to meet MGTS' requirements. The qualifications demanded by MGTS were: Craft; CSE 2-4 in English, maths plus two Others; Technician; CSE 2+/G.C.E. 'O' level in Physics, maths, English plus one Other. Access was gained to the Apprentices' Records of 108 apprentices; 84 craft and 24 technicians.

Adopting the same approach as sub-section a), it was found that 80 (95%) of the craft apprentices and 22 (92%) of the technician apprentices had taken the subjects set down by MGTS. For craft, two had not taken maths and two

had not taken English. Two technicians had not taken physics. On the question of grades in particular subjects, 69 (82%) of the craft apprentices achieved MGTS grades in those MGTS subjects they had taken, and 18 (75%) of the technicians reached the appropriate grade in the MGTS subjects they had taken. Maths was the problem for craft; 12 apprentices failed to get CSE 2-4 in maths. For technicians, physics was the most common stumbling block; four failed to get high CSE or 'O' level. Generally, only a small proportion of both craft and technician apprentices had not taken specific subjects required by the MGTS. Getting MGTS grades was more problematic. Overall, on subjects required and level of grades demanded by MGTS, 77% of craft and 75% of technicians had taken all the subjects demanded and achieved the appropriate grades in those subjects. Taking all 108 into account, 77% had attained the MGTS's qualifications.

c) Those Meeting/Not Meeting their Firms' and the MGTS's Criteria

Of the 73 apprentices referred to in sub-section a), (the total of 84 minus 11 who were in firms not requiring qualifications), only 34 (47%) got qualifications which met the firms' and the MGTS's criteria. On the craft side, 38% gained qualifications which met the criteria of both firm and MGTS, and for technicians exactly two-thirds attained qualifications which met the criteria of both their firms and MGTS.

The main question here is why just over a half (53%) of these 73 apprentices got qualifications which were not good enough for either their firms or MGTS; why had so many 'failed'? However, it should be noted that only 13 (18%) failed both their firms' and MGTS' criteria - a third of all those failing. Furthermore, the majority of the failures failed marginally; they either had not taken only one required subject or failed to get the grades in one subject; 22 out of the 39 failures were marginal failures. But certainly, the question of the scale of examination failure raises the question of why it was tolerated, why more exam failures were not removed.

(vi) Conclusions and Discussion

This chapter addressed the question of the nature and significance of qualifications for employers. It was argued that the main role of qualifications was as a measure and indicator of crucial learned skills. However, this role was limited by the fact that most apprentices were taken on before the results were known; hence the attraction of tests as a substitute measure of these learned skills - especially numeracy and literacy (Chapter Fourteen).

It was also argued that the main reason why employers did not just recruit the most qualified applicants was that they were concerned not to risk overacademicism. They did not wish to end up with frustrated and bored young recruits who were unwilling to subsume their wills within their labour powers to an appreciable degree.

Yet the scale of young people taken on who did not come up to their firms' and MGTS' qualifications criteria was still surprising. Within the earlier discussion in this chapter and previous findings the magnitude of qualification failure seems understandable. First, work attitudes were more important than qualifications; Chapter Six established this, as do examples of qualitative data in this chapter. Secondly, there were the practical reasons for sticking with exam failures (on employers' own criteria) pointed out earlier; exam results were unknown at recruitment and the disruption of re-advertising and recruitment for those that had failed could be great. Thirdly, qualifications were rarely determinative and placed above everything else; Chapter Six showed this on the 'Most Important Factor in Recruitment' analysis. Together, these explanations might seem sufficient to explain the failure rate. Yet CEES employers were concerned about key learned skills, (numeracy and literacy skills), as the next chapter illustrates. Why was this concern not reflected in a more ruthless approach to exam failures? The answer to this unwinds in Part Four. Maths and English were the two most important subjects (even for craft recruitment). The next chapter looks at what these qualifications indicated - numeracy and literacy skills.

Chapter TenNUMERACY, LITERACY AND ENGINEERING EMPLOYERS IN COVENTRY(i) Introduction

In this chapter it will be shown that Coventry engineering employers' criticisms in the local press of the numeracy and literacy skills possessed by applicants for engineering apprenticeships rested on scanty empirical foundations. The findings on mathematical skills in the CEES were enigmatic. Section (v) shows that CEES employers were vague and hazy about precisely where, which particular mathematical skills, applicants for engineering apprenticeships had supposedly deteriorated on. Ultimately, the criticisms of Coventry engineering employers on engineering apprenticeship applicants' mathematical skills rested on vague general impressions that standards had declined and the fact that the CDEEA had 'proved' they had declined through research. This last point was often used by the larger firms and MGTS firms to support their views on declining numeracy standards. But, the CDEEA research was methodologically unsound. We are left with the engineering employers' impressions that numeracy standards had declined.

On literacy, Section (vi) shows that apart from clarity of handwriting (for all applicants) and to a lesser extent spelling and composition skills for technician applicants, literacy skills did not figure prominently in the recruitment of engineering apprentices. A third of the CEES employers did not take the four key literacy skills that were surveyed into account at all during recruitment. Furthermore, research in Coventry by Worthy and Maden (Coventry Education Committee:1978a; Worthy and Maden:1979) showed that literacy skills were infrequently used in training (except for log books - which they saw as basically a form of discipline, a demonstration to training officers that apprentices were willing to conform and toe the line) and used even less in the labour process in engineering. At every turn the engineering employers' arguments on numeracy and literacy rested on poor empirical foundations, vague impressions, erroneous research or irrelevant demands. There was a lack of substance and coherence in their arguments.

Insofar as there was substance there was disagreement about which particular skills had declined. These arguments are the specific arguments arising from the CEES. However, they are situated within the framework of more general and wider considerations.

Section (ii) notes the historical dimension to debates about numeracy and literacy. Employers' complaints about falling numeracy and literacy standards are perennial. This also establishes the overall perspective on these key learned skills. It is argued that there is no substantive evidence that standards of literacy and numeracy declined in the 1970s or early 1980s. However, from the point of view of capital, individual capitals, sectors and the national capital the crucial issues rest on: first, raising standards of numeracy and literacy as part of raising the quality of labour power; secondly, for individual capitals, if the learned skills of their labourers are above the social average for the trade; and thirdly, the average quality of literacy and numeracy as labour power attributes across the sector and its relation to other sectors of capital; finally, if the literacy and numeracy standards of the national labour power are of a higher or lower level than international competitors. These are the crucial questions and issues rather than a sterile debate about falling standards.

In Section (iii) there is a brief description of the national debates on literacy and numeracy in the Engineering Employers' Federation (EEF) and the higher echelons of the AUEW and the EITB. It shows a remarkable consensus. In Section (iv) the Coventry debate on numeracy and literacy in the engineering industry is examined. This debate was particularly important for three reasons. First, the CDEEA conducted research which became important nationally. It gave those employers who heavily criticised the numeracy and literacy standards of school leavers some apparently real evidence, as opposed to anecdote, rhetoric and tabloid hatchet jobs of comprehensive schools described by the Education Group (1981). This research apparently demonstrated that whilst the average intelligence of engineering apprentice recruits remained stable in the early 1970s literacy and numeracy scores in standard tests had declined. Secondly, this research fuelled the national debate. Writers in the national 'EEF News', the monthly newsheet of the EEF,

referred to it as clear proof of what they had believed all along. But thirdly, and most importantly, employers in the CEES were clearly influenced by the national and especially the local debates on numeracy and literacy in the engineering industry. It is for this reason above all that these debates must be examined in some detail. They provide crucial contextual material and background within which the CEES employers' perceptions of the numeracy and literacy standards of school leavers moved.

(ii) Numeracy and Literacy - A Perennial Problem

Many researchers, commentators and analysts have noted employers' criticisms of the numeracy and literacy standards of school leavers. Doe (1980) pointed to an Assessment and Performance Unit report which showed that fractions and decimals seemed to 'baffle young mathematicians'. An OECD (1977a) report argued that employers were reluctant to employ young people partly because of poor numeracy and literacy skills. In the 1970s in particular, employers believed that schools were failing to transmit the necessary basic skills (Finn:1982). Frith (1978b,1980b) pointed out that employers in the 1970s believed that there was widespread ignorance of the 3R's amongst school leavers. MSC reports supported employers' arguments on the 3R's (MSC:1976). Employers' own research backed up the perceptions of individual employers who aired their views in the national and local press on poor literacy and numeracy standards; (for example, Association of British Chambers of Commerce:1979). The national press was awash with crass statements that 'standards had fallen' in the 1970s (Education Group:1981). All this is only the tip of a massive iceberg, swelled by the chill winds of the Great Debate launched by Prime Minister Callaghan in 1976.

There was a particularly virulent attack by employers on the numeracy and literacy abilities of school leavers in the 1970s. It was more convenient for employers to blame youth or their schools for 'falling standards' than to accept responsibility for youth unemployment (Frith:1978b). But employers were not just scapegoating young people and schools in the 1970s when economic conditions did not require the employment of youth on scales

hitherto known in post-War times. They were critical of their literacy and numeracy even in the post-War boom era of the 1950s and 1960s. A report by CBI Wales (1977) argued that Welsh industrialists' fears about poor standards in the 3R's went back to the late 1960s, whilst speakers at a conference on the recruitment and training of youth in 1958 (FBI:1958) argued that apprentice recruits were not sufficiently versed in the basics.

Employers' complaints about numeracy and literacy were perennial. Reeder (1979) noted that there were continual complaints from industrial representatives about the 3R's of youth in the late nineteenth century. Observation of management journals shows that these complaints were also present throughout the 1920s and '30s.^[1] This historical evidence leads to the questioning of the whole basis of employers' complaints. What is the real evidence on numeracy and literacy standards?

Without getting into the byzantine detail into which such discussions sometimes fall, three general points can be made. First, there was no evidence that standards of numeracy and literacy fell between the early 1970s and the late 1970s to early 1980s. Wright's (1977) extensive study suggests that standards did not decline in the 1970s in relation to either pre-War standards or 'any time in the past'(p.190). But, neither was there evidence to show that standards were significantly higher in the 1970s than in the past. On this last point Simon (1984) has disagreed. He shows that in terms of the proportion of the age cohort getting various levels of qualification there was clear improvement between 1970/71 to 1981/82. Recent research by Sofer (1988) reveals that the proportions of school and college leavers with at least one 'A' level, with five or more (A-C) 'O' levels or CSE equivalents, and the proportion with at least one 'O' level, rose between 1944 and 1983. The proportion leaving school without any qualifications fell. She concludes that during this period educational standards rose. By implication, standards of literacy and numeracy on which the overall rise was based on, must also have risen.

Raffe's (1987) conclusion, that there is no evidence on the supply side of the youth labour market of any decline in educational standards, appears a

sound assessment. However, he notes that as more stay on at school it is possible that young people entering the labour market at 16, (when the vast majority of apprentices are taken on) may have declined in relative terms despite the overall improvement.^[2] Reid (1980) found that employers were mainly concerned with the educational standards of young recruits. There was no widespread dissatisfaction amongst employers she studied regarding the educational standards of young recruits. Even at the level of employers' perceptions of standards of literacy and numeracy, employers were not always hypercritical.

The important issue is not just whether standards have declined, but the extent to which they can be raised and how they relate in the sphere of competition. From the perspective of capital in general the crucial issue is raising the quality of labour power attributes, in this case literacy and numeracy skills. Capital can never be satisfied with a particular level of these skills, for it is their speed of application in the labour process and the relation of this to cutting necessary labour time that is crucial. It is not just a question of the ability to add up. From the exchange aspect of labour power it is how quickly the worker uses the calculator or does mental or manual arithmetic. As was argued in Chapter Seven, the notion of 'needs' is meaningless here; there is no upper ceiling to the speed required.

Secondly, in the sphere of competition, at the level of the labour market, individual capitals are concerned that the labourers they employ are at least at the social average, but preferably above it, in terms of literacy and numeracy skills. Ceteris paribus, this gives them a higher quality of labour power relative to competitors. Of course, we saw earlier that there are considerations (overacademicism) which place a limit on and regulate this drive to socially produce and recruit labourers above the average. Where these collide, the contradiction between the exchange and subjective aspects of labour power gains practical force.

Thirdly, sectors of capital struggle over attempting to attract the best raw material for labour power and to assert that schools pay attention to labour power attributes developed within youth which relate to their industries.

Indeed, Reeder (1979) has argued that one difference between late Victorian times and now is that in the former industrialists made criticisms of school leavers as individuals. Today, employers' organisations give a greater and more organised, (through research, conferences and meetings) expression to these criticisms. Ostensibly, they speak for whole industries.

Finally, there is the national dimension. Green (1988) has argued that the problem is not that standards are falling, but that they are low in comparison with international competitors. He argues that the ruling class has underinvested in raising the quality of labour power relative to Japan, France, Sweden and Germany. These countries have invested significantly more in public education, although we need not go into the reasons why here. On all these four counts capital can never be satisfied with the literacy and numeracy skills of labour power. The continual moans about standards of literacy and numeracy not only stretch back as a long moan of history, but it can be predicted with confidence that they will continue in every capitalist country until the downfall of capitalism. Capital can never be satisfied on the literacy and numeracy skills of labour power.

(iii) Numeracy and Literacy - The National Debate in Engineering

The EEF was constantly calling for higher standards in numeracy and literacy in the mid-late 1970s. In particular, there was an emphasis on the 'basics' - arithmetic and written and oral communication (EEF:1976b,1977b). It was argued that schools should concentrate on these rather than teach engineering itself or indulge in vocational training. The EEF argued that there was 'much evidence' (EEF:1977c,p.16) collected from selection tests to show that standards of literacy and numeracy had declined. Apprenticeships were no longer attracting able youth; youth entering apprenticeships lacked basic maths and communication skills (EEF:1978a). The able were going to other sectors of capital.

What is more surprising is that these criticisms were echoed, sometimes with greater force, by AUEW and Confederation of Shipbuilding and Engineering Unions (CSEU) leaders and national officials. Hugh Scanlon, AUEW President,

moved a resolution on 'Youth - Apprenticeships' at the CSEU Annual Meeting arguing that schools should be more geared to the needs of industry in the final year of schooling (Scanlon:1976b). The Executive Committee of the AUEW was more specific the following year at its National Committee Meeting, where it was argued that schools needed to improve their standards of attainment in the skills of numeracy and literacy (AUEW Engineering Section:1977). Scanlon persisted with these criticisms in an article in the 'AUEW Journal' (Scanlon:1978a). In the same year he also gave the Presidential Address at the Annual Youth Conference of the AUEW arguing that more must be done in schools on basic numeracy; if it was then training boards could spend less time teaching it (Scanlon:1978b). The following year, in his Presidential Address at the CSEU Annual Meeting, he argued that greater emphasis should be put on mathematics in schools to challenge Britain's industrial competitors (Scanlon:1979). This was not a one-man crusade. Bill Jordan, then a Divisional Organiser, now AEU President, argued that the record of schools on numeracy and literacy was 'a tragedy' (Jordan:1978), whilst Gee (1978) (a South Wales training officer) in an article in the 'AUEW (Engineering Section) Journal', argued in support of Scanlon's views on literacy and numeracy. Thompson (1978) wrote a sarcastic letter to the 'Journal' arguing that it was 'hopeful' to expect higher numeracy and literacy standards as teaching in schools was deteriorating. Scanlon was not alone, and such support, especially from the AUEW Executive Committee (AUEW Engineering Section:1977) enabled him to maintain views which cast aspersions on trade unionists in education.

Given the co-incidence of views on the poor numeracy and literacy of school leavers in general and those entering engineering in particular between employers and leading trade unionists, it was not surprising that the Engineering Industry Training Board, (of which Scanlon was Chairman in the late 1970s), should also agree on this point. The EITB Annual Report (EITB:1977) of 1977 noted the 'dissatisfaction about school leavers' (p.2) and the 'increasing criticism of numeracy' standards (p.24) and literacy (ibid.). Frank Metcalf, Director of the EITB, argued that standards of numeracy and literacy of school leavers was 'appalling' (p.2). Whilst

research carried out by the EITB concluded that:

'It is known that there are very real problems of low arithmetic attainment among young people entering the industry.'
(Matthews:1977,p.96).

This view found its way into the trade journals. For example, in 'The Engineer' (3/3/1977), it was reported that the EITB were worried that 'school leavers have no grasp of arithmetic.'(p.15). 'The Engineer' also carried articles reflecting the general concern of employers with literacy and numeracy standards (for example, Sumner:1976). This solid consensus between the EEF, the unions and the EITB made criticism of the general view of the numeracy and literacy of school leavers difficult. This consensus was fuelled by the Coventry debate on numeracy and literacy, and in particular the research carried out by the CDEEA. It is to this we now turn.

(iv) Numeracy and Literacy - The Coventry Debate

Analysing CEES employers' demands in isolation from local debates on the subject in the press, the CDEEA and the MGTS would be hazardous. These debates clearly influenced the responses to the questions on numeracy in the CEES - especially for MGTS firms. Therefore, they require examination.

The starting point was an article in the 'Times Educational Supplement' (TES) (Venning:1976) where the CDEEA argued that from 1971 to 1975 the standards of English and arithmetic of applicants for apprenticeships to the local group training scheme, (the forerunner to the MGTS), had declined. This was despite the fact that the non-verbal reasoning ability of applicants during the same period had remained about the same. The implication was that the performance of schools had declined on these skills. The article had given rise to a lot of debate in Coventry according to Roger Gilbert, the Training Executive of the CDEEA, who had done the original research.^[3] The findings were based on the National Institute of Industrial Psychology (NIIP) selection tests used by the Coventry group training scheme for the recruitment of engineering apprentices. The NIIP tests had been heavily criticised by local teachers according to Gilbert.^[4]

Wright (1977) was also critical of both the NIIP tests and the CDEEA findings set out in Venning (1976). His main criticism was that the NIIP tests used imperial units, whilst Coventry schools had been teaching in metric only for some years. He also criticised the research for not taking the ROSLA into account; 15-year-olds in 1971 were being compared with 16-year-olds in 1975.

Gilbert himself was well aware of these criticisms (Gilbert:1977). The NIIP test was originally designed in the 1950s and hence included imperial measurement questions. Nevertheless, Gilbert believed that his findings were valid. On the point that some of the language in the NIIP tests was antiquated (for example, fractions were written with sloping rather than the more modern horizontal line), Gilbert argued that insofar as this affected the results of his research this merely supported his view that:

'...schools must be presenting mathematical questions in a way which does little to help pupils with problem solving in the post-school world.' (Gilbert:1977,p.5).

On imperial measurements, Gilbert noted that the engineering industry in Britain still worked in imperial and metric; both should be taught in schools. Teachers had criticised the tests on the grounds that fractions were used. Again, Gilbert's reply was that it was still necessary to use them rather than rely totally on decimals. Fractions were used in engineering, '...further education and in life.'[5]

To mid-May 1980, Gilbert was consistent in his line: the standards of numeracy of young people had declined 1971-75 and the research he had carried out using the NIIP tests had shown this. This was put across to me in two interviews I had with him in May 1980. Then came a dramatic recantation. An article in the 'TES' (Doe:1980) cast doubt on the original 1976 research. As Doe argued, the importance of this research was that:

'In 1976, this was about the only concrete evidence to support the view that standards were falling. It was soon followed by the Great Debate and regional conferences on education...'

In an article in the 'Coventry Evening Telegraph' (CET:5/6/1980) the following week, Gilbert said that the 'same tests' (the NIIP tests) had

'revealed a totally different picture' to his original study when examined in 1978. He noted that '...the results were so varied that it would be wrong to draw conclusions.'(ibid.) He was not unreservedly apologetic, for he argued that his original research had:

'...led to a lot of useful discussion and more understanding between industry and school...[and]..It doesn't alter the fact that in 1975, school children were not being prepared in the way that industry wanted them to be prepared with regard to their ability in basic arithmetic, basis spelling and understanding of grammar.'(ibid.)

He stood by his original conclusions; all the 1978 findings showed was that standards in the 3R's had improved since the early 1970s. But Gilbert failed to concede that conditions regarding youth unemployment were different in the late 1970s. With fewer jobs employers had more choice. It would be difficult to separate rising standards from more competition purely on the basis of youth recruited. Independent evidence was required. Gilbert provided none.

Employers in the CEES tended to bring up this saga. Although some were embarrassed at the volte-face, most tended to emphasise the 1976 findings rather than the 1978 position. As well as the public debate, Gilbert's research also stimulated an internal debate amongst CDEEA member firms and MGTS firms. He wrote a number of papers based on his 1976 findings and presented them to the CDEEA members.^[6] Furthermore, Gilbert's views gained currency in a variety of training and education contexts, and other representatives of the CDEEA (especially the Director), and the MGTS, echoed his views in the local press. The CDEEA had representation on the governing bodies of all three technical colleges and the local polytechnic and had members in 'most relevant advisory committees' (CDEEA:1980). Several CDEEA members were governors of local schools, and the CDEEA Director sat on the Coventry Education Committee and Further Education Sub-Committee. An Industry/School Liaison Committee and a Training Officer Committee had also been set up by the CDEEA; Gilbert himself was a member of both of these. Regarding the former of these committees, the membership came from representatives of large engineering firms in the City, plus one firm from Leamington, a medium-sized MGTS firm and two representatives each from MGTS

and the CDEEA.

The Coventry LEA responded to the CDEEA criticism with a big research effort resulting in Coventry Education Committee (1976,1978a), Worthy (1976) and Worthy and Maden (1979), and MSC/Coventry Education Department (1977a,b,c). G.C. Firth, ex-Coventry Deputy Director of Education, noted that the 'great public concern' about numeracy and literacy standards in Coventry in the 1970s required a response from the City Council, whatever the validity of these concerns (Firth:1977,p.317). The result was a resolution of 14 December 1976, which emphasised the place of numeracy and literacy in the curriculum (ibid.). This was an important victory for the CDEEA. It led to concrete initiatives. For example, the CDEEA worked closely with teachers at Caludon Castle School from the mid-1970s devising test papers on engineering mathematics. The Head at this school argued that schools needed to concentrate more on the 3R's (Inness:1976). Thus, the Gilbert-CDEEA-MGTS position on declining standards of numeracy got a wide airing and had practical consequences for education in Coventry. The 1976 research also had an impact on the national debate in engineering. It was alluded to as evidence of falling standards in 'EEF News' (for example, Tomlinson:1976).

Certainly, CEES firms were influenced by what they had been told from their contacts with the Association or the MGTS. For example, Metagear Machines followed the Gilbert-CDEEA-MGTS line closely:

'...from my understanding of my contacts with Midland Group they've got better,..[standards of numeracy: GR]..in the last couple of years. We had a lot of publicity, er..generally, that schools weren't training for engineering, and locally Midland Group have done a lot to alleviate that, and er,.. and we have, because we have these parties of school kids round. We are trying to do something about this, and it is being done **collectively**, and I think in the last two years, 'yes' the standard has improved.'[Research Notes,employer's emphasis]

CEES employers mentioning that numeracy standards had improved very commonly mentioned the role of the CDEEA and the MGTS in bringing this change about through influencing the schools to make the requisite adjustments to their maths syllabuses. The qualitative data indicates that the public and internal debates within the CDEEA and MGTS firms had influenced the findings on numeracy in the CEES, although it is impossible to say to what extent. It

would seem reasonable to expect that exposure to the Gilbert-CDEEA-MGTS line varied along membership/non-membership of the CDEEA and MGTS. Whether interviewees read the 'Coventry Evening Telegraph' might also be pertinent as the Gilbert-CDEEA-MGTS line on numeracy had wide exposure in its pages over the 1976-80 period.

Firth (1977) noted that standards were rising if exam statistics were a reliable measure (p.318). Research by Gray and Jesson (in Wilby:1987) showed that when social disadvantage is taken into account, the educational record of Coventry in terms of exam results was exceptional. Coventry had the fifth best results out of 96 local education authorities. Against findings such as this, Coventry engineering employers' criticisms of local educational standards seemed jaundiced. Unless they wanted to take the credit.

(v) Numeracy^[7] - The CEES Findings

There were five main questions on numeracy in the CEES. First, the employers were asked what mathematical skills they expected applicants to have when they presented themselves for interview, (for craft and technician apprenticeships). The choice of the fifteen skills was made from a background of interviews with Roger Gilbert, certain publications on the topic of numeracy in engineering,^[8] and from data for the Pilot Study.

Secondly, CEES employers were asked if, from their own experience of recruiting apprentices, they had noticed any improvements or deterioration in the fifteen mathematical skills of applicants in the previous five years. Thirdly, they were asked to **specify** in which skills applicants for apprenticeships had improved/deteriorated. The fourth question was about whether knowledge of both Imperial and metric measurements was 'essential/desirable or neither'. Finally, they were asked whether craftsmen did conversions on the shopfloor.

On the first question, Table 10.1 shows that apart from addition/subtraction, which employers universally expected applicants to be able to handle, all the other skills were more commonly expected for

technician than for craft applicants. This reflects the tendency for technicians to use these skills more in the labour process and in training. Further research would be required to show the strength of this proposition.

When the employers were asked whether applicants had improved in terms of these skills in the last five years, more said that they had not - (49%) - than had, (only 15%). By implication, those saying that young people had not improved in any were saying that they had improved in none. There was a surprising amount of ignorance; 23% of all firms said that they did not know if there had been any improvement in applicants mathematical skills in the last five years. There was also vagueness amongst the (sixteen) employers who said that young people had improved in one or more of the 15 skills when it came to specifying which particular skills young people had improved in. Eleven out of the 16 (69%) said that they could not specify at all. They pointed to a 'general improvement' over the last five years. The five that felt able to specify areas of improvement saw trigonometry as the main cause for celebration; four out of the five mentioned it. Three mentioned that addition/subtraction and multiplication/division had improved. Two firms mentioned addition/subtraction of fractions and multiplication/division of fractions and there was one reference each to improvement in skills 8,9 and 14 in Table 10.1. On actual evidence that these improvements had occurred, the firms noted that test scores had improved, that apprentices recruited had performed better on mathematics both on-the-job and at college, and those pointing to a 'general improvement' commonly relied on impressions (in the interview or after recruitment).

A number of explanations as to why these improvements had occurred were also put forward by the 16 employers. The commonest was that they were getting a better selection of applicants due to the squeeze on the local youth labour market. Acapulco Cars explained the improvement in terms of a shift from the old NIIP tests to the Birkbeck B1-B5 tests; thus, the improvement was more apparent than real. Acapulco argued that applicants dealt better with the more modern language of the Birkbeck tests (described in Chapter Thirteen). Another common explanation was that the teaching of mathematics had changed; schools had put more emphasis on the basics. This in turn was explained by

MGTS or CDEEA pressure on the schools, or the schools responding to criticism in the local press. S.D. Machine Tools saw it in terms of what both the MGTS and the firms had done; the improvement in numeracy had occurred because of the collaborative efforts of the local engineering industry - the pure Gilbert-MGTS-CDEEA line.

When the employers were asked whether young people coming from school had deteriorated in any of the 15 skills in the last five years the results were more positive and they were less vague on their explanations. Only 8% pointed to no deterioration in any of the 15 skills. Over a half (54%) of all firms pointed to deterioration in one or more. Of the 58 firms that noted deterioration, 52% were able to specify the precise areas where deterioration had taken place, (as against an equivalent percentage of only 31% for improvement). The rest, 28 firms, noted a 'General deterioration'. Of the thirty firms that did feel able to specify the particular skills applicants had deteriorated in, it was the basic skills that they went for most commonly; the four basic rules plus fractions - skills 1,2,10 and 11 in Table 10.1. There were examples of firms who said that they had had to turn down applicants because they were so poor on the basics.

On evidence that deterioration in the 15 skills had occurred, it was often pointed out that:

'...You find out when you get 'em in the shop - simple as that.' [B. Styles (Engineering) Co:Research Notes].

They could not do certain elements of arithmetic or mathematics on the shopfloor. As with improvements, other types of evidence suggesting that young people coming from school had deteriorated in the 15 skills included test results and questions asked in the interview. The employers were quick to offer explanations of deterioration. There were more explanations of why young peoples' numeracy had deteriorated in some or all respects than were offered on why they had improved. Some of these explanations were long and tortuous. Most were general explanations, and only a few explained why specific elements, (such as fractions or tables) had deteriorated. The most common explanation was that schools had not spent enough time on the 3R's

and maths in particular. Altex Ltd argued that new subjects were crowding out the 3R's. The deterioration in numeracy skills could be traced to this process. Imperial Carriers argued that although it might seem that not enough time was being spent on arithmetic, yet this was more apparent than real. Imperial believed that young people had been taught the basic mathematical skills but that they had forgotten them. The basics were done at primary school and in the first few years at secondary school. By the time pupils got onto advanced work in their later years at secondary school they had forgotten how to do the easier stuff they had done 'years before.' The implication of this explanation was not drawn by the interviewee himself, was that there could be revision on the basic mathematical skills in the final year(s) of schooling. Altex Ltd argued that standards had deteriorated:

'...because you get a heck of a lot of Asians in classes these days,...(which makes a teacher's life difficult),...so you get an awful lot of people in a class who can't read and write, (in English)..I mean, honestly, someone down the line 'as got to suffer. It is probably the brighter child.' [Research Notes].

Altex explained deteriorating numeracy standards in terms of classes having a lot of Asians who could not read English holding the other pupils back. Altex was alone in the CEES on holding this racist explanation. Another general explanation was that those with acceptable skills in mathematics were going into service occupations and careers which involved further study. Engineering had to make do with the second best. Chapter Twelve shows there was some empirical support here. Staying-on rates increased in the late 1970s and early 1980s. CCS data showed that few of the better qualified were interested in engineering (Chapter Twelve).

Most of the explanations relating to specific skills centred around the schools not giving sufficient time to these. Thus, Parkinson Bros. noted the lack of emphasis on mental arithmetic in maths lessons. F. Cross & Sons believed schools had not covered fractions in maths lessons. Classic Engineering bemoaned the 'fact' that schools did not learn tables by rote any more, and Harvey and Brinton Ltd. castigated the schools for turning out people who made mistakes in the basics - the four rules of arithmetic -

Table 10.1 : MATHEMATICAL SKILLS YOUNG PEOPLE WERE EXPECTED TO HAVE WHEN THEY PRESENTED THEMSELVES FOR INTERVIEW - PERCENTAGE EXPECTING EACH SKILL : CRAFT AND TECHNICIAN

MATHEMATICAL SKILLS	TECHNICIAN Recruiters: % expecting X (n=52)	CRAFT Recruiters: % expecting X (n=105)
1. Addition/Subtraction	100	100
2. Multiplication/Division	100	99
3. Ability to Memorise (x2-x12) tables	98	83
4. Ability to Add and Subtract Mentally	90	86
5. Ability to divide and Multiply Mentally	88	80
6. Addition/Subtraction of Decimals	100	97
7. Percentages	75	54
8. Conversion of Fractions to Decimals	98	90
9. Use of Reference Tables	94	80
10 Addition/Subtraction of Fractions	92	83
11 Multiplication/Division of Fractions	87	71
12 Transposition of Formulae	85	37
13 Use of Pi	85	63
14 Square Roots	77	46
15 Trigonometry	81	63

arguing that more time could be spent on them in the final years. These specific explanations all congealed into a general one; more time should be spent on mathematical skills X,Y,Z. The implication here was that schools should cover these skills more. This was where the importance of the collaboration between the CDEEA and Caludon Castle school and the City Council resolution to meet local industry's demands on numeracy and the other initiatives come in. Coventry schools were being more closely tied to the dominant local industry in terms of numeracy skills in the curriculum.

The Old Imperialism and the New Metrification

From Gilbert's and the CDEEA's perspective the problem was that local schools had concentrated on the metric system in maths, yet the engineering industry in Coventry and Britain was still making the transition from

imperial to metric measurements (Gilbert:1976). However, when Worthy (1976) undertook a survey of engineering companies in Coventry, she found that employers complained about mathematical weaknesses amongst school leavers in relation to the basics, percentages, use of pi, transposition of formulae and trigonometry - but she did not refer to complaints about converting between imperial and metric.

The CEES supports Worthy's non-findings. Only 16% of the CEES employers said that the ability to convert between imperial and metric was 'essential' at the point of recruitment. Furthermore, just over a third (35%) said that the ability to convert was 'neither essential nor desirable', leaving fifty per cent saying it was 'desirable'. It was the larger firms that were more likely than the medium and small firms to say that the ability to convert was 'neither essential nor desirable'. This becomes understandable when we view some of the factors these firms put forward as explanations of their response. Such factors included: the fact that all the conversions were already worked out on the drawings in the drawing office/planning department, (the most common reason given); that apprentices learnt how to convert at technical college in their first year day release; that most drawings were in metric and the machines were in metric, so there was no problem; both sets of measurements were on the drawings; and calculators and conversion charts were freely available. The larger firms were more likely to have drawing offices and planning departments and the resources for producing drawings with dual measurements. Only 20% of MGTS firms said that craftsmen never did conversions on the shop floor. Of the 80% that said their craftsmen did do conversions, nearly a third said that they did them only 'occasionally'. These findings reflect the relative absence of planning departments and drawing offices in MGTS firms which were mainly small and medium-sized.

Others firms pointed to a policy of buying new machines with dual controls and digital read-outs, but they also pointed out that this process would take decades before all machines were replaced by dual or metric machines. The cost of replacing imperial with metric dials was prohibitive according to

the CEES employers. The economic climate did not help:

'We...er,.last year we had a Metrification Committee that was set up to look at the costs of converting the machines, but that's been held in abeyance because of the economic climate.'[Wingfield Transmissions: Research Notes].

In these conditions, rather than blame the schools for going metric and being out-of-step with industry, (as the CDEEA had done), engineering employers in the CEES stoically accepted the situation. A few were apologetic about not 'keeping up with the schools'. Given the costs of converting machines or dials and the time it would take to replace imperial with metric on a 'buy metric' policy for new machines, most tended to minimise the problems of conversion rather than moaning about the schools going metric. There was a divergence between the CDEEA and Coventry engineering employers on this issue.

CEES firms played down the difficulties of the situation in a number of ways. First, they noted that converting between the two measurements was not difficult anyway. Tudor Panels noted the numerous tables and charts that could be referred to for things like drill sizes. Meadowcroft Tools thought that the ability to convert was unimportant as the mathematics involved were easy. Conquest International believed that efficient recruitment with attention to finding those with the potential, rather than the actual ability, to convert was sufficient. Minex Communications also argued that if lads had the basic intelligence they would soon learn how to convert. Hence, some firms thought it was easy to do, whilst others such as Minex and Conquest qualified this by arguing that if the selection processes were efficient then those recruited would soon pick it up.

Metagear Machines and D. Clarke (Engineers) said they did not want schools to teach conversions on the grounds that it would be better if everybody gradually changed over to metric. It was also argued that conversions could easily be taught to apprentices on-the-job; they quickly saw its relevance and generally soon learnt it. It was pointed out that as long as apprentices could use a calculator and understood multiplication there would be no problem. Firms with the MGTS could count on the MGTS instructing first

year apprentices in conversions. Thus, by the time apprentices arrived at their firms it was usually no problem.

The pragmatic response was just to accept that the schools did not do imperial and make the best of it. This stoic acceptance was a common response. School-bashing, on the lines that 'schools were out of step with industry' and absolutely ~~must~~ do something about teaching fifth formers imperial measurements, was rare. The majority conceded that 'industry was out of step' with 'progress' or EEC membership. Imperial Carriers pointed out that if anyone was 'out of step' it was not the apprentices who could not use imperial but the older workers who struggled with metric. Imperial Carriers said that there had been 'general confusion' when imperial dials were replaced with dual-purpose ones. Eventually the dials were changed back to imperial. Davies-Roche and Olmec Machine Tools also gave examples of experienced workers struggling with metric drawings and conversions.

The greatest difficulties arose in cases where drawings were in metric only, as the majority of firms had a large percentage of their machines still in imperial. Nearly a third (29%) had 100% of their machines in imperial. At the other end of the scale only 6% of CEES firms had machines that were totally in metric. Surprisingly, 12 firms (11%) could not even estimate the percentage that were in imperial - showing a certain ignorance of their labour processes. In general, CEES firms argued that they just had to put up with the burden of conversions between two measurement systems. Old machines with economic life in them could not be scrapped just because they had imperial dials; it was cheaper to convert.

(vi) Literacy

Less attention was paid to literacy in the CEES as compared with numeracy. This reflected discussions with employers in the Pilot Study and with Ken Wardle of the MGTS and Roger Gilbert of the CDEEA. The argument for paying less attention to literacy was twofold: first, it was not deemed to be as crucial in the actual labour process as numeracy; secondly, local employers were more concerned about numeracy than literacy, arguing that standards of

the former had declined more than the latter in the 1970s (Gilbert:1976).

Gilbert believed that standards of literacy had declined enough to arouse the concern of employers and trainers. In his (1977) he discussed the 'Literacy Problem'. He gave anecdotal evidence that standards of literacy had declined, noting the 'appalling' grammar and spelling in letters of application, application forms and tests. Again, this evidence came from applications to the local engineering group training scheme, (the forerunner to MGTS). Ken Wardle of the MGTS also noted the 'terrible' letters of application and echoed Gilbert's arguments on declining standards of literacy in the 1970's.[9]

On the basis of interviews with Gilbert and Wardle, from reading Gilbert (1976,1977) and the Pilot Study, it was decided to concentrate on the following: clarity of handwriting; punctuation; spelling; and composition skills. The four skills chosen were those that appeared to be uppermost in the minds of local engineering employers in relation to literacy. CEES employers were asked if they looked for any of the four skills when they were recruiting apprentices.

a) Clarity of Handwriting

More looked for clarity of handwriting than any of the other three skills. Allowing for the fact that 33 firms did not look for any of the four skills, then 92% of the 74 remaining firms that did look for one or more of the four skills looked for clarity of handwriting. The CEES firms had a number of explanations as to why clarity of handwriting was important.

Fox Electrical Engineers pointed to the fact that craftsmen and apprentices had to fill out job sheets at the end of each job. Unclear writing made reading these 'a bind'. However, Fox Electrical added that apprentices soon learnt this skill for if the job sheets were not filled in properly then they would not get paid! But by far the most common explanation of the importance of clarity of handwriting was that it was essential for the log books written as part of the training programme. The log books of

apprentices had to have clear handwriting for three main reasons. First, if the apprentice was to make good use of the log book he must be able to read it in later years. Secondly, scruffy log books could mean an apprentice not getting an EITB certificate of competence, yet still being on the skilled rate. Panther Radiator Co. gave an example of a lad who was on the skilled rate, due to an agreement that apprentices are put onto the skilled rate when they were 21, yet he had still not got his EITB certificate as his log book was so bad - though his practical work was acceptable on EITB standards. Thirdly, the log books, if untidy, reflected poorly on the company as well as the individual apprentice. According to Classic Engineering when the apprentice went to the MGTS or on day release he represented the company. Reasonable log books were essential, and legible handwriting was important.

Large group D-E firms occasionally noted a connection between clarity of handwriting and applicants 'making an effort' in their applications. If young people sent in forms with partly legible writing then this said something about their attitude as well, according to these employers. They had a 'couldn't care less attitude'. For large firms with hundreds of application forms and letters to sift through this was crucial; they could not waste time on illegible forms. Furthermore, if an applicant sent in a good letter it implied that they had thought about what they had done and had taken care, as opposed to someone who 'just blunders on, not thinking of the consequences.' [Conquest International: Research Notes]. The latter 'could spill over into the work situation.' [ibid.]. If young people were careless with their letters of application then might not they also be careless at work? If handwriting was clear it showed that applicants had taken time and effort. D. Clarke (Engineers) noted that the letter of application was generally the first contact candidates had with the firm, and neat letter writing could create a favourable first impression. From these examples it can be seen that clarity of handwriting was as much about attitude, character and first impressions as about the technical skill of writing.

b) Punctuation

This was not as important as Gilbert had indicated. Overall, six per cent looked for it. Only large group E firms gave it much prominence, where 30% looked for it; - and this mainly for technicians. Technicians were commonly required to write reports, both as part of their training and in the work situation. These might have to be submitted to top management and secretaries could not be expected to correct too much punctuation. A few large CEES employers recruiting relatively large numbers of technicians thus gave it at least some minimal regard.

Interviewees in a few small group A firms went so far as to admit that they were not very good at it themselves. Wroxborough Jig and Gauge looked for it, although it was 'not too important'. Wroxborough saw it as part of creating a good first impression. Again, it was largely to do with seeming to 'care' and to have made an effort. None of the employers sang the praises of punctuation. It rated easily as the least important of the four skills.

c) Spelling

Only a third of CEES firms (31%) looked for spelling. It was important for technicians, far less so for craft. Technicians did more written work, both in training and the labour process. Spelling was hence more of an issue for technician applicants. Six group D firms said that they looked for the applicants' ability to spell, but five of these firms said that this was only for technicians. As with punctuation, a number of interviewees, (including surprisingly, Minex and Imperial Carriers - group E firms), admitted they were not very good at it themselves. Minex's was an interesting response. According to Minex spelling had got worse amongst applicants, and if they turned down applicants on poor spelling, then '...we'd never get anybody!...[Laughs]..' [Research Notes]. Furthermore, Minex noted that standards of English had declined even further than standards of maths amongst school leavers - the opposite to Gilbert's findings.

Finally, once again, spelling told employers as much about a lad's character

as it did about their technical ability to write English. Good spelling created a good impression. Those not bothering to look up a word they were unsure about for something as important as a job application were not, as Vortex Patterns put it, 'of a reasonable character.' They were the kind that might not bother at work either where important details were concerned. Their characters were questionable.

d) Composition

Just over a fifth (22%) looked for it. It was more important for technician than craft recruitment. Of the ten group D-E firms that said that they looked for it, nine did so only in relation to technicians. Carbitool Ltd. summed up the situation most succinctly:

'I think it's really a case of being able to put their own thoughts down in a clear and concise manner...Particularly for technicians...for the craft lad we're just interested in that they can make themselves understood on a piece of paper...What he..[the technician].. writes, rather than how he writes it is important; the logical approach: to pick it up, read it and understand it.' [Research Notes, employer's emphasis].

Thus, for technicians, the ability to structure an argument in a logical sequence, to present data and conclusions in a coherent form - these were important. Report writing skills were sought for, or at least the potential to write reports; Auto-Gears argued that actual report writing ability was not important as it got taught at college. The majority of technician recruiters argued, in contradistinction to Auto-Gears, that the skills of logical presentation, putting points of view across clearly and the ability to write an account of events should be there prior to recruitment. The foundations of report writing had to be laid in the schools.

e) Those that did Not Look for Any of the Four Skills

A surprising 31% of the CEES firms did not look for any of the four skills. Substantially more than the 8% that did not look for the numeracy skills. A few firms went so far as to suggest that this was because applicants did not

need literacy skills. Fairfax Engineering argued this point, noting that young people needed literacy skills if: '...they go in for an office job...they need it there, but not otherwise.' [Research Notes]. New Midland Sheet Metal qualified the statement that applicants did not need these skills by pointing out that they could be learnt on day release and on-the-job. The interviewee at New Midland generalised from his own experience:

'I was always in trouble at school through my handwritin', and I came up through the shopfloor! If you wanna do it you can do it!' [Research Notes, employer's emphasis].

Certainly an applicant would not get far without a certain level of competence in literacy skills at the large firms in the CEES, but smaller firms setting no qualifications and not subject to the rigours of the MGTS requirements could afford to take a more relaxed view regarding literacy - especially those where there was no compulsory day release and apprentices with poor literacy skills did not have to struggle with college courses.

More commonly, these employers were just not bothered about literacy skills:

'I employ him to knock metal about, not to write letters, so it doesn't bother me too much.' [S. Sharpe & Son (Engineers): Research Notes].

For Sharpe & Son, it was the practical skills, the skills that directly went into the creation of use values that were important. Writing was not much use in sheet metalwork according to Sharpe; it was irrelevant as a labour power attribute. Unless they wanted to move to one of the larger firms where literacy skills did count. Or when they wanted to be foremen. This narrow parochial view made sense from the employers' perspective but the young person might face severe limitations within the youth and adult labour markets if their literacy skills were poor. In engineering they were condemned to the small firms with fewer promotion possibilities and generally poorer working conditions.

One explanation why these firms did not look for the four skills or any other literacy skills might have been that craftsmen did not use them very much in the labour process. It was mainly small group A-B firms who did not look for these skills, and few of these firms took on technicians. A study

carried out by Worthy and Maden (Coventry Education Committee:1978) discovered that:

'In engineering, the writing demands during training are heavier than those of the job itself.'(p.4)

According to Worthy and Maden, the log book was the most important element of work involving writing skills for craft apprentices in engineering; (although in my view the writing done on day release was of a greater volume - I say this from having taught craft classes in further education colleges). There was a mismatch between the amount of writing done in the log book and the writing demanded by the job itself, according to Worthy and Maden. Craftsmen did not appear to write much at all. They noted that:

'Most training officers appeared dissatisfied with the general standard of log book entry, complaining of poor presentation, illegible writing, limitations of vocabulary, and weaknesses of grammar and syntax...'

Yet,

'...apart from accurate terminology and clarity, the written language actually used on the shopfloor was not found necessarily to involve writing skills mentioned as inadequate in apprentices.' (ibid.p.7)

The importance of the log book was thus not explicable with reference to the literacy used on the shopfloor. Worthy and Maden argued that the importance of the log book lay partly in '...establishing appropriate social and disciplinary relationships.'(ibid.) It was part of the armoury used by training and personnel staff to control the apprentices in their transition to skilled status. It also marked out those who were interested in promotion to foremen from the rest; those who produced neat log books showed that they were willing to conform to managerial demands and to 'knuckle down' (ibid.). Literacy skills in apprenticeship were really more to do with displaying that apprentices had desirable personality traits and work attitudes rather than demonstrating that they had certain writing skills per se. This was less true for technicians where literacy skills were more important in training and in the labour process.

(v) Summary and Discussion

In this chapter it was argued that there was an underlying drive for employers to raise the learned skills of their labour power through the social production of labour power and recruitment, both from the perspective of capital in general (through the exchange aspect of labour power) and in the sphere of competition. The constant complaints about numeracy and literacy coming from employers since the nineteenth century rest on this basis. These complaints were examined in relation to the engineering industry in the 1970s as, particularly at the local level, they influenced the responses of CEES employers to questions on numeracy and literacy - though to what extent remains unclear. They were made within a context where real standards of numeracy and literacy were not falling (Wright:1977), and maybe even rising (Simon:1984; Sofer:1988), and where Coventry appeared to have an excellent educational record on national comparisons (Wilby:1987). However, there may have been some decline for the actual youth recruited due to the more able staying on in greater numbers during the 1970s (Raffe:1987). Chapter Twelve looks at this in the Coventry context.

The CEES findings on numeracy and literacy were revealing. Just over a fifth (23%) did not know if numeracy skills had improved, and an almost similar proportion (24%) did not know if they had deteriorated. On the latter, those that did know were quick to note deterioration in mathematical skills but were very vague regarding precisely which skills had deteriorated. They were vaguer on which skills had shown improvement. Eleven per cent could not even estimate the proportion of their machines that were based on imperial measurements. There seemed to be a surprising amount of vagueness and ignorance in terms of what the specific deficiencies of apprentices' numeracy and literacy skills were and the actual machines in the labour process. The findings on literacy showed that the CEES employers had modest demands. Basically, these were that applicants should write clearly. Punctuation was not important, and spelling and composition were given regard only for technician recruitment in large firms.

The research carried out by Worthy and Maden (Coventry Education

Committee:1978; Worthy and Maden:1979) revealed that engineering employers in Coventry were demanding literacy skills primarily for apprenticeship training (especially log books) and further education. They found that literacy skills were not used much on the shopfloor. This illustrates a contradiction between two of the three perspectives on labour power attributes outlined in Chapter Six. In essence, the literacy skills used in the labour process and socially produced within the later stages of the social production of labour power (practical education and training) were in excess of those used in production in terms of the range of skills. CEES employers had very modest demands in terms of literacy skills, skills defined and assessed in relation to their own labour processes. There was a contradiction between labour power attributes utilised in production and those socially produced, although the relation between labour power attributes defined and assessed in recruitment and those utilised in production seemed a close one. The CEES research did not address this contradiction. Worthy and Maden suggest that it was founded on work discipline and the attempt to raise the quality of work attitudes.

This chapter, together with Chapter Nine, illustrated the dilemmas faced by employers within a fragmented social production of labour power. There were apparent cost benefits in not directly producing labour power; employers did not have to hire teachers, buy books and build classrooms. But abnegation of financial and direct control of elements of the social production of labour power created problems. On the one hand employers were subject to the demands of educational institutions involved in the further development of labour power after recruitment, such as further education colleges, which meant criteria entering recruitment that were not authentically their own; education effects. On the other hand, they were drawn into asserting influence on general education so that it became practical education in relation to their labour processes. This was behind the importance of the interventions and campaigns run by Gilbert and the CDEEA. It was an attempt by the local engineering sector of capital, a dominant force in the local economy, to have its practical concerns inserted into general education in schools regarding numeracy and literacy. The strength of the campaign

yielded practical consequences; general education became more practical for engineering employers in Coventry. Schools were directed to make it more so, and collaboration at Caludon Castle School was the embryo for concrete results.

Yet this was only effective influence, not control. Real control would ultimately mean employers socially producing labour power themselves, from scratch, something history shows they are loath to do as its direct relation to surplus value production is not a pressing and immediate reality. Thus, like the perennial moans about numeracy and literacy skills, it can be expected that individual employers, but especially their more organised associations, speaking for the whole sector of capital, will ever try to tighten the bonds between school and the labour process from their perspectives - to make general education more practical. Devoid of real control they are reduced to campaigns, dubious research, media-mongering and school-bashing. At this point the question of the perspective of the working class arises. Opposition to the dominant view that standards had declined and schools (and hence partly teachers) were to blame was stifled by union leaders such as Scanlon who acquiesced to the employers' perspective. However, the views of Scanlon and his supporters in the AUEW rested on a real problem for the working class; reformism. Workers do have a real interest in education and training in capitalism. Thus, when union leaders argue that these are inadequate they are partly appealing to this interest. The real difficulty is to frame demands on education and training which avoid reformism yet appeal and relate to workers aspirations (Brown:1987a) - a task best tackled elsewhere in work devoted entirely to that end.

Chapter ElevenFAMILY LIFE AND THE REPRODUCTION OF LABOUR POWER(i) Introduction

The previous chapter examined the extent to which CEES employers looked for key skills learnt in the classroom in apprentice recruitment: numeracy and literacy skills. This chapter looks at some of the factors that figured in recruitment which were located beyond the classroom - even beyond the school. These factors were circumstantial elements; they related to certain circumstances that applicants were in. In Section (ii), the recruitment criteria examined only indirectly relate to the applicant. It shows how the applicant's parents, family life and home life were being assessed by CEES employers in terms of their effects on the applicant's quality as labour power (its current quality and potential for development through social production). They were not attributes of the applicant as such. This follows the distinctions made earlier between the criteria of recruitment, attributes sought in the applicant in recruitment and labour power attributes. These overlapping distinctions must be kept in view in order to understand what employers are doing in recruitment, what classes and categories of criteria and attributes are being assessed.

This chapter demonstrates the importance of two main points. First, it shows that the majority of CEES employers enquired into the 'family situation' of applicants. They did it for a number of reasons. There was some evidence of discrimination against applicants where parents were divorced or separated. The argument was that a stable home background was more conducive to the practical and emotional support that apprentices required during their apprenticeship. The occupation of fathers was also important, as if they were engineers they could be useful in giving practical advice. General parental support was important; parents had to want their sons to do an engineering apprenticeship. On the other hand, employers were also on the lookout for parents who were 'pushing' reluctant sons into engineering apprenticeships. Sons subjected to such pressure invariably did poorly or

left. These were the main sources of employer interest in the 'family situation' of applicants.

Secondly, the previous point shows the importance of the distinction made in Chapter Two between the social production of labour power and the first phase of the reproduction of labour power. What the CEES employers were assessing when they looked at family background was the quality of the reproduction of labour power up to the point of recruitment. They were also led to speculate on how the perceived quality of an applicant's labour power as reproduced in his family would affect the likely success of the further development of his labour power through apprenticeship. The employers brought their prejudices against deviations from what they considered to be normal family life to bear here. The quality of the first phase of the reproduction of labour power was being assessed by the CEES employers through a dissection of the family situation of applicants. Intimate relationships were assessed in the light of an applicant's propensity to develop into fine quality labour power. Family life, personal life, relationships - all were scrutinised with the possibilities for the development of an applicant's labour power in view.

(ii) Family Life

This short chapter is concerned with the extent to which the engineering employers enquired into the family life of applicants and the reasons why they did it. In Chapter Two, the distinction between the social production and the reproduction of labour power was made. The first phase of the latter referred to the upbringing of individual members of the future working class, the children of wage labourers. In the recruitment of youth the capitalist is concerned with the quality of this reproduction insofar as it provides the raw material out of which labour power is eventually socially produced. He also takes into account the ongoing reproduction of labour power, the quality of family life, as he sees it, as the young worker will be dependent on his family of origin until he earns enough to gain economic independence. He will want to know how this will affect the success of the

further development of the young labourer's labour power and hence his eventual quality as a labourer. This is the basic importance of enquiries into the family life and background of applicants for youth jobs. The concrete concerns of the CEES employers with the family background of applicants reflected these points.

The CEES firms were asked if they made any efforts to enquire into the 'family situation' of applicants for apprenticeships. The question was included following a conversation with Ken Wardle of the MGTS, where he had stated that until recently the MGTS had rejected applicants from one-parent families.^[1] MGTS still collected information on the 'Domestic Circumstances' of applicants; there was a section on this on the MGTS Interview Record.^[2] This section aims to discover what types of 'domestic circumstances' CEES employers deemed to be significant. The question was drawn very broadly as the Pilot Study had shown that other factors apart from single parenthood were important in relation to the family background of applicants; especially the occupation of parents (particularly if the father was in engineering), how well applicants got on with their parents, how much encouragement parents gave the applicants in relation to schooling and career choice. In short, a range of considerations relevant to an assessment of the quality of the reproduction of labour power from the employers' perspective; hence the general question.

Getting on for three-quarters (71%) of all firms did make efforts to enquire into the family situation of applicants. It was a widespread practice amongst firms of all sizes. The small and medium-sized firms especially seemed to want reassurance that applicants were getting parental support and encouragement, both in general and particularly in relation to them becoming engineering apprentices. Both types of support were important when the apprentice faced various crises during apprenticeship: problems with money (especially in the first two years when wages might be much lower than non-apprenticed mates); 'girl-friend' problems, pressures from mates to skip college (especially unemployed mates) or to move to better-paying work, problems with supervisors, and so on. Most apprentices had some problem or other during their apprenticeship according to the employers. They were

young people going through a difficult period of their lives in difficult circumstances. Where parents gave the apprentice support and encouragement these crises were more easily resolved it was argued. Parents could be invited in, the problems discussed and hopefully solutions found. Parental pressure on their apprenticed offspring to 'change their ways' might bring tangible results.

Parental support should ideally be consistent over the four years of the apprenticeship, and the depth and quality of support was also important. As Greengate Cycle products put it:

'And when we have the parents here we go through the various points with them, you know, what sort of support they are gonna get for four years. You know, are they just gonna leave a lad in our hands an' say: 'Well, if that's what he wants t'do, good luck to him', or are they going to give real support and be behind him all the way.' [Research Notes, employer's emphases].

Real, solid and consistent support was what was required as this would help if the apprentice faced any of the crises of youth noted above. Thus, the parents and quality of family life were being assessed too.

The interviewee at Parkinson Bros. argued that the considerations such as those noted by Greengate Cycle could make a difference to the individual apprentice and enhance their chances of successfully completing their training. There was more emphasis on fathers taking an interest in their sons' apprenticeship than mothers, but the important point was that at least one parent showed interest in their offspring's apprenticeship. Part of the explanation for the emphasis on the father taking an interest in their son's apprenticeship rather than the mother was that some employers (from mainly small firms) actively looked for applicants whose fathers were in engineering. Such fathers could give their sons advice and maybe practical support (explaining machinery, processes). In particular, if a father was in the same trade as the applicant's firm then this was seen as being even better as some of it might 'rub-off' [Hills Gears]. Of course, behind all this was usually the assumption that fathers should be more interested in their sons careers, in a practical sense (what the sons were doing in some detail), than their mothers. Engineering apprenticeship was a Man's World;

apprentices were nearly always viewed as 'lads' by the employers and indeed the vast majority were young men. At a small number of group A firms (7%) only fathers were interviewed along with the apprentice. Where employers asked both parents to come in one got the impression that it was the views of the father that carried most weight on the final decision to recruit.

A further reason as to why the CEES employers were interested in the family situation of applicants was if there was any evidence of the parents trying to push reluctant young people into engineering apprenticeships. Those parents who were too enthusiastic and trying to force the son into engineering apprenticeship could be just as problematic as those who were not bothered at all. The employers were on the lookout for this scenario.

Finally, small employers which looked into the family situation (especially patternmaking firms) argued that if the applicant got on well with the rest of his family then it was likely they would fit in well with a close-knit workforce. They viewed their small firms as 'families' where factors such as trust and respect for others was vital. It was with reference to these factors that D. and L. Patterns said that applicants with a criminal record were unacceptable.

Against Applicants from Single-parent Families

Strangely it was the medium and large firms that seemed to have the most reactionary and prejudicial views on applicants coming from single-parent families. None of the small firms mentioned it. For example, Altex Engineering were clearly against employing applicants from 'broken homes':

'This is something that's very difficult; are they going to get parental support? It's difficult to ascertain through application forms and interviews. However...uhm...[silence]..unfortunately, broken homes and this sort of thing - (you can usually ascertain whether they have problems of that sort),..we try not to let that influence us, but if you look at past records it would be silly for us not to,..because, invariably those who have had a bad domestic situation have problems with their apprenticeship. So, although, from a moral point of view, you try not to...'Well that lad (y'know), has no parental support',..or: 'He's from a broken home', or, 'His mother and father got divorced' or something of that sort,..er, I think it does sway us to a certain

extent.'[Research Notes, employer's emphases].

Altex Engineering were trying desperately to separate moral from practical considerations. They had nothing against the offspring of one-parent families per se. It was just that they did not make very good apprentices. 'Home problems' spilt over into the apprentice's work situation. But the message was clear: the quality of the reproduction of labour power in broken homes was inferior, thus, these applicants must be routed out, moral qualms notwithstanding. Acapulco Cars also gave a tortuous account, full of evasions and attempts to separate interview tactics, mock-morality and deception, but it was basically the case that:

'I want to know: who's responsible for him? Who does he live with?...I tell them, 'I'm not interested in what your parents do - whether they're parted, living together, divorced or what.'[Research Notes, employer's emphasis].

Ascertaining the degree of apparent stability, normality and conformism in the family life of applicants was what Acapulco was really after. Acapulco also hinted that in some cases applicants who came from large families might be a liability:

'Brother and sisters; we enquire about that because I had one or two instances, (two instances),...I've had one lad, seventeen years of age who nearly had a nervous breakdown because 'e couldn't find anywhere quiet to do his homework.'[Research Notes, employer's emphasis].

Acapulco were discriminating against applicants from large families where bedroom-sharing was unavoidable. It was standard practice for firms such as Altex Engineering and Acapulco to ask such questions, a deliberate tactic to weed out those whose family life suggested trouble in their apprenticeship.

Auto-Gears did not have any moral queasiness about pursuing ruthless interview tactics on this question:

'That's a standard question: 'what do yer parents do?'..just to see if they've got both parents there.'[Research Notes].

Given the importance of personality traits and character we witnessed in the overall assessment of applicants in Chapter Six, and given the view that some medium-large firms had, that applicants from 'broken homes' were more

likely to have character defects resulting from a lack of one parent, and which in turn was more likely to lead to problems in the apprenticeship - then such discrimination was explicable. But indefensible. Hence the moral contortions of these interviewees. There was no systematic quantitative analysis of the degree of discrimination against applicants from one-parent families. But from examining the qualitative data it could be estimated that about 10% of firms took such a line. The disturbing thing was that it was the medium-large firms where this form of discrimination manifested itself most clearly - firms that employed the largest numbers of apprentices, and where it would have a substantial effect in recruitment.

But S.D. Machine Tools showed that not all firms asked such questions within the context of discrimination against single-parent applicants. They appeared to try to ascertain whether fathers were present as this might affect interview performance. Where applicants came from single-parent families S.D. argued that they wanted to know this as it may affect interview performance, and it could be taken into account. S.D Machine Tools was the most overtly understanding of firms on this issue.

Rather than asking questions about family background to see if it affected the interview performance, (and take it into account as an extenuating circumstance in appropriate cases), a number of (mainly group A firms) decided to leave the family situation well alone. A clear demarcation between home life and working life was drawn. With this orientation there was no need for the deviousness and deceptions practised by firms such as Acapulco. On the other hand, unlike S.D. Machines, home circumstances were not taken into account in explaining poor interview performance. Applicants in these firms were standing alone before the employer at the interview.

(iii) Family Life: The Evidence

The CEES firms were asked how they enquired into the 'family situation' of applicants. Questions in the interview were the most common method used - just over a half (53%) of the 76 firms who enquired into the family situation of applicants said they asked questions in the interview on it.

This was the only method used by large group E firms. The larger the firm the more likely it would ask questions in the interview and the less likely it would be that there would be a separate interview with parents. The latter was mainly explained by the fact that it would create a significantly enlarged workload for apprentice recruiters in group D-E firms where relatively large numbers of apprentices were still being recruited in 1980/81. Where separate interviews with parents or separate interviews with the father only occurred, they invariably came right at the end of the recruitment process, as a final check, just before the final offer.

Separate interviews with parents was the second most common method used to assess the family situation - 30% of CEES firms used it. The third most common method was to invite parents to the second interview; 10% of the CEES firms did this. Only one other method was important - 5% CEES firms used the MGTS reports. School reports were only used by one firm for this purpose.

Overall, 40% of firms invited parents in for interview at some stage during the recruitment process. None of the group E firms did it as it added to recruitment time on an already stretched schedule; hence their reliance on questions in the interview, and perhaps this partly explains why some of them went to such lengths a la Acapulco in ascertaining the family situation in the interviews with applicants where it was the only method used.

(iv) Discussion

Brown (1987a) has argued that 'it is the personality package that must be sold in the market place'(p.125), but this chapter shows that far more is assessed than is bought. Young peoples' family ties, their relationships with their parents and intimate details of their personal lives are assessed. For the recruiters of engineering apprentices in Coventry it is clear that what they buy is not just the applicant's labour power and the right to socially develop labour power attributes within it, but they get the applicant's relationships with their families as a largely invisible, but indispensable and crucial side-order. The reproduction of labour power (its first phase) must be assessed and dissected to ascertain its likely

effect on the social production of the applicant's labour power. This chapter reveals one of the links between the first phase of the reproduction of labour power and the social production of labour power as outlined in Chapter Two.

This chapter illustrates a further simple point: the whole life activity of the person, including her/his intimate familial relationships, is sucked into the vortex of the recruitment process and scrutinised. The person as a whole is assessed as well as her/his labour power attributes as the labourer and her/his labour power are inseparable. Labour power is but an aspect of the person, the person seen from a particular vantage point, from the perspective of capital. It is not something separable as a distinct thing.

On this analysis it is unsurprising that applicants are assessed not just in terms of their labour power attributes, but also on criteria which are circumstantial and which are relatively independent of their being as labour power, yet are deemed to affect the social production of their labour power through their effects on their person as a whole. They are assessed on how factors outside their person might affect them as people and hence affect the process of the development of their labour power.

Applicants for apprenticeships did not choose their families, and the use of criteria based on the supposed quality of family life was iniquitous, but for some CEES employers an apparently unstable home background was a mark against applicants for apprenticeship. Applicants from 'broken homes' were a relatively poor investment in terms of the potential for developing their labour power. This point becomes important in the discussion in Chapter Twenty-one when the phenomenon of employers taking on the sons of employees (and their own sons) is examined. It is the first hint that the recruitment process is the habitat of a range of common prejudices and is essentially anarchic as recruiters do not just recruit on labour power considerations, on labour power attributes as assessed in recruitment. Part Four develops these points further.

P A R T T H R E E

[RECRUITMENT METHODS]

A Crisis of Interest in Engineering - Recruitment Methods - What Can
Schools Do? (to Improve the Quality of Applicants).

* * * * *

Chapter TwelveA CRISIS OF INTEREST IN ENGINEERING AND THE COVENTRY YOUTH LABOUR MARKET(i) Introduction

Part Two concentrated on the criteria of recruitment, particularly the attributes sought in applicants in recruitment. The CEES was to the fore. Part Three looks at other aspects of the fieldwork. It is more concerned with recruitment methods. However, this chapter concentrates on one of the key findings of Part Two; the CEES employers' concern with applicants' lack of interest in engineering. It also relates this finding from Part Two to the work on the youth labour market in Part One and findings from the Apprentices' Study. It is argued that Coventry engineering employers' concern with applicants' interest in engineering mainly resulted from the structure of the youth labour market in Coventry.

The crisis of interest in engineering is located in relation to the literature on first, employers' general complaints that school leavers are insufficiently interested in going into industry; and secondly, the general lack of interest in engineering as a career amongst British youth. In the Coventry context, the CDEEA, CEES and other engineering employers in Coventry were worried about both aspects. They were concerned that the City's youth did not want to go into industry in general and engineering in particular, especially the better qualified. It is argued that the crisis of interest in engineering was real enough in Coventry.

Section (iii) looks at some of the evidence on work attitudes of youth in Coventry and argues that young people in Coventry did not have poor general work attitudes, but not enough of them were enthusiastic about working in engineering. Their specific work attitudes seemed poor to engineering employers as they were stuck with too many young people who were not committed to engineering, youth whose will was insufficiently subsumed under the subjective aspect of their labour power.

Findings from the Apprentices' Study in Section (iv) give concrete examples

and data on a lack of interest in engineering amongst apprentices. A significant minority (20%) were not interested in engineering when they were recruited. Their real career interests lay elsewhere. They had failed to get the jobs of their choice partly because of the tight youth labour conditions in Coventry described in Chapter Five, but also because of the structure of the Coventry youth labour market, with its heavy reliance on manufacturing in general and engineering occupations in particular.

Section (v) describes explanations of the crisis of interest in engineering given by engineering employers in Coventry and the CCS. It is argued that these explanations may well have specific roles to play during particular periods, but they failed to explain the long-standing crisis of interest in engineering. The final Section (vi) provides the overall explanation. It is argued that the structure of the Coventry youth labour market engendered the crisis. Significant proportions of youth had to go into engineering and engineering apprenticeships. In these conditions it was not surprising that employers encountered too many who would rather be doing something else.

(ii) A Crisis of Interest in Engineering

'Readers [of the Chamber of Commerce newspaper] will be aware of the concern by representatives of the engineering industry about the apparent drift of school and college leavers away from the traditional industries of the area.' (CME:3/1980).

CEES employers were well aware of it. References to it cropped up throughout the questionnaire at a number of firms. The relevant issues were most succinctly put forward by Dunkley Gauge, Jig & Tool Co. Dunkley Gauge argued that there had been a general decline of interest in engineering amongst young people in Coventry. There was direct evidence of it. When groups of school pupils came on trips to Dunkley, after the factory tour, the interviewee asked them what careers they wanted to do. Out of the last three groups (six in each, mixed sex groups), none of them had replied that they wanted to go into engineering. Teaching, banking or insurance: 'service industries!' [Dunkley Gauge] were preferred. Dunkley went on to say that the reasons these pupils gave for not wanting engineering were mainly that their

fathers worked in engineering and had advised them against it, and that the money was poor.

Douglas (1977) supported the perceptions of these school pupils and their engineering fathers. He argued that men were leaving the industry because of low pay, low status, insecurity brought about by redundancies and low promotion prospects. Rather than follow Douglas (1977), and examine conditions within the industry as the starting point for explanation of the lack of interest in engineering amongst school pupils, CEES employers generally looked elsewhere. Schools were blamed for giving kids the wrong 'image' of engineering or (less frequently), simply telling pupils to go into the service sector. Dunkley dated the onset of the problem to 1977. The Engineering Employers' Federation saw it as a national problem originating in the early 1970s (EEF:1975), whilst the CDEEA dated the beginning of the problem to at least 1968, arguing in 1973 that:

'...there was a need for greater effort to improve and sustain the image of the industry. Teachers and pupils were gaining impressions, particularly from the news media, of a very troubled industry which lacked career prospects. The Association therefore intend(s) to try and present a more balanced view of the industry and its career prospects to school-leavers, with the aim of attracting more and better applicants for apprenticeship and other forms of industrial/commercial training.' (EEF:1974).

The problem was not just one of a general decline in interest in engineering; there was also the specific problem of '...the reluctance of high achievers to enter industry.' (Lorriman:1985). Young people with 'O' levels were increasingly either taking 'A' levels or, if they left school, choosing the service sector, according to Coventry engineering employers. Gilbert (1977) saw it as a long term problem originating in the late 1950s. Putting Lorriman (1985) and Gilbert (1977) together, it can be seen that there was a dual problem; attracting young people into industry in general and engineering into particular. Industrial capital and the engineering sector had to compete to attract a better calibre of school leaver.

The general problem of attracting school leavers into industry has received substantial comment in the literature. Researchers and academic commentators have noted employers' perceptions that teachers seemed to be putting across

negative images of industry, business, technology and wealth creation (Blackledge and Hunt:1985; Brown:1987a), and that pupils (Frith:1980b; Jamieson:1985) and teachers (Schools Council:1966) were ignorant about industry and had the wrong view of it. Bates (1984) and Moore (1984) have argued that employers and their representatives are now demanding that pupils and teachers should 'esteem' industry (Moore:1984,p.75) and hold it in high regard. This can be seen in Mueller (1977) where she argues that teachers should help pupils to raise the esteem in which industry is held in the community. Smith (1977) argues that not only wealth creation but the wealth creators should be esteemed (p.5). At a CBI conference in 1979 (CBI:1979) it was argued that the general public needed educating in the importance of business life. Schools provided the ideal 'captive audience'(ibid.p.41) for this purpose. However, employers and their representatives did not always agree that teachers themselves could cultivate this esteem within the consciousness of pupils; they were part of the problem. As early as the Clerk Report (1931) it was noted that there was a 'black coated worker tendency'(p.53) within secondary school staffrooms. What was needed was teachers more sympathetic to industry. Reeder (1979) shows that employers' arguments about teachers being anti-industry were nothing new. Avent (1982) concurred in this view, and argued there was 'no doubt' that teachers put kids off industry (p.66). Smith (1977), Arthur (1979) and Weinstock (in Finn:1979) argued that teachers could not be trusted to put over the required message. Employers argued that they were not just anti-industry; they were also ignorant about industry (Ralphs:1976; CBI Wales:1977). Hence the calls for teachers to get industrial experience and the various schemes to help them get this (CBI:1970b; McLain:1976; Watts:1983). Others blamed the media (Arthur:1979) as contributing to the poor image of industry with images of industrial strife, whilst Ivison (1979) blamed parents. Industry escaped censure.

There was also the specific problem of attracting youth into engineering. Hugh Scanlon, AUEW President, argued that there were real problems of attracting the 'right sort' into the industry, especially into apprenticeships (Scanlon:1976a,p.177). However, he yielded something to

Douglas' (1977) arguments by noting that differentials were lower, therefore the financial attractions of apprenticeship were insufficient. Others (Lawrence:1979; Jamieson:1985) pointed to the low status of the engineering industry in Britain.

These general and specific problems haunted the CEES employers. Unlike general attitudes to work, Coventry engineering employers had real cause for concern regarding interest in engineering. The next section examines the evidence underpinning this concern, from the CEES research, other local research, Careers statistics and other evidence.

(iii) Interest in Engineering: Some Evidence

'In Coventry, the Engineering Employers' Federation has gone on stressing the shortage of technicians and craftsmen throughout the rise of unemployment, and...has gone on accounting for the shortage by reference to the lack of qualified school leavers - able pupils are, it seems, choosing alternative areas, hence the need to sell industry, to counter the undermining effects of industrially ignorant teachers.'
(Frith and Buckley:1978,pp6-7)

Finn's (1984) research amongst fifth formers in three schools in Coventry and one in Rugby in 1981 confirmed these earlier findings by Frith and Buckley. Of the 44 'Academics' of Finn's sample, (those with four or more 'O' level entries), only five (11%) wanted craft or technician apprenticeship. From both groups 24% wanted apprenticeships. It should be noted that this included hairdressing, lorry driving, and so on - not just engineering apprenticeships. Even these modest demands for skilled training were unlikely to be met. If we subtract those job choices that demanded education beyond the fifth year, then we are left with 128 who might have entered the labour market to get jobs; 27% of these wanted apprenticeships. In Coventry, in 1981, 3,151 fifth formers entered the labour market (CCS:1982a). On Finn's data something like 850 of these would have wanted an apprenticeship. But only 458 got jobs with 'craft or other systematic training schemes' in 1981 (CCS:1981).

No great claims as to the representativeness of Finn's (1984) sample could be made, (as one of the schools was in Rugby), but these calculations show

that with the 'virtual collapse of apprenticeships' many of the expectations of 1981 Coventry fifth formers 'would be blocked' (ibid.p.31). Only 13% of Finn's sample appeared to require jobs necessitating a return to full-time further education or school sixth forms, yet 39% of Coventry's 1981 fifth formers returned to school or went into further education - some did this no doubt in response to not being able to obtain apprenticeships, and even more being unable to get any work at all; only 19% of the year group got work (CCS:1981). A figure of 850 1981 fifth formers wanting apprenticeships in Coventry is reasonable when large firms such as Orion Products received over 400 applications for their apprenticeships before Christmas 1981, (for young people starting the following summer), and had to write to 500 more saying that they could not accept any more applications from after Christmas to when I interviewed them, (March 1981). Some of these would be 17+ year olds, or youth living outside Coventry, but the picture of a tight market for apprenticeships and youth jobs in general no doubt led some to take, '...any work that was on offer and forget even the minimal expectations that they had when leaving school.' (Finn:1984,p.33). Young people were compromising their job choices and entering jobs they were not particularly interested in, despite the fact that they wanted '...jobs that were interesting...in terms of the social or the technical relations of the work.' (ibid.p.31).

The peculiarities of the labour market in Coventry meant that since the 1950s 50-60% of young males leaving school were destined for the manufacturing sector whatever their subjective 'job choices'. Developments in the youth labour market in the 1970s made 'job choice' a nonsense. In 1981, 978 fifth form leavers had gained work by the end of January 1982 - 19% of the year group and 31% of those entering the labour market (CCS:1981). Of these 978, 34% had jobs in engineering. Apprenticeships, or 'craft and other systematic training schemes' of one year+ duration, as they were defined in CCS (1981), accounted for 47% of all jobs entered, and engineering apprenticeships, including the electrical category which were mainly electrical engineering and maintenance apprenticeships, were 52% of all apprenticeships (CCS:1981). For males, apprenticeships accounted for 50% of jobs entered in 1981, and engineering apprenticeships accounted for 58%

of all apprenticeships. Despite the damage done to manufacturing, and engineering in particular, by the recession of 1980-81, it was still the case for 1981 male fifth form leavers that engineering provided: a) the best chance of a job, and, b) the best chance of a skilled craft or technician apprenticeship. Only building provided other significant apprenticeship opportunities for male 1981 fifth year leavers. For females the situation was dire - with only 20 apprenticeships in hairdressing, 18 in office work and 22 in all other categories (ibid.). With so few apprenticeships going (half of these in engineering), and with intense competition caused by the general lack of jobs, engineering apprenticeships were perhaps inevitably going to attract some young people who wanted a 'trade' or 'skilled training' but not necessarily engineering. As we shall see later, the results from the Apprentices' Study tend to confirm this. The crisis of interest in engineering manifested itself in young people getting apprenticeships who were not interested in engineering. It also manifested itself in the fact that unemployed youth were not rushing to get into engineering, despite the fact that it offered the best chance of a job.

The Qualifications and Career Choices of the Young Unemployed

An examination of the qualifications of the young unemployed in Coventry from 1975 to 1982, based on statistics from the CCS, indicates that although employers' representatives argued that 'well-qualified' young people were 'hard to get' - even in the recession of the early 1980s - there appeared to be sufficient numbers of suitably qualified young people available. Whether they wanted engineering was the crucial point. The conclusions below are based on nine CCS documents covering the 1975-1982 period.^[1]

It was difficult to draw any firm conclusions. First, some of the documents excluded significant sections of young people seeking work, (typically those on schemes). Secondly, the information on qualifications did not include subjects passed; the most that can be said is that 'X' number of young people had the right level of qualifications in terms of GCE/CSE grades. Without information on subjects passed they were only 'possibly eligible'

for apprenticeships. Thirdly, the data includes information on 16-18 year olds in many cases, and 17 and 18 year olds would not be eligible for apprenticeships in some engineering firms on age grounds.

Despite these inadequacies, the argument that insufficient numbers of suitably qualified young people wanted to come into engineering does seem to be generally supported by the analysis of this information. There were sufficient numbers of qualified young people around; the problem was that not enough of them wanted to go into engineering. This situation was particularly noticeable for those with technician-level qualifications. However, employers' moans about the education system in Coventry producing poorly qualified leavers in general were entirely misplaced. The youngsters with the qualifications were there, but their hearts were not in engineering. Neither was it the case that they had poor general work attitudes, as the next sub-section makes clear. The problem was that they had poor specific work attitudes; their work attitudes were not sufficiently oriented towards engineering. They wanted to work, but not in engineering.

Work Attitudes of Young People in Coventry

Studies of the attitudes to work of young people in Coventry, actual studies of young people themselves, as opposed to research into employers' perceptions of these attitudes, have found that young people generally had a good attitude to work before they started work. They mostly wanted to work and were well-motivated regarding looking for work. Finn's (1984) research led him to conclude that:

'Despite mass unemployment they wanted to make the transition...[to work].. They were motivated, had already started to look for work, and would undoubtedly put a lot of energy and activity into the search for work.' (p.33).

Furthermore, Finn discovered that 75% of the pupils in his study had some form of part-time employment - a key indicator that they were motivated to work. A study carried out by the Education Department's Youth Opportunities Unit (1978d) in 1978 with 150 16-19 year olds who had been unemployed for

more than six months, found that 90% of the sample said they were actively looking for work. Most of the others not seeking work were either pregnant or looking after a child (ibid.p,49). Another Youth Opportunities Unit study (1979a) carried out with ex-trainees from a Short Industrial Course in 1978 found that 95% of them said they were actively looking for work. Coventry Careers Service statistics tend to support these findings. Out of 5,418 school leavers in the fifth year group in Coventry in 1982, 1,980 had returned to full-time education by November 1982, 3,306 had entered the labour market and 132 had left the district (CCS:1982c). Of those that had entered the labour market, 571 were unemployed and not on YOP/Pilot YTS or Community Industry. Of those 571, 201 were not actively seeking jobs or schemes - 35% of the totally unemployed, 6% of those entering the labour market and 4% of the year group (CCS:1982f). Only 71 of those 201 seemed to be 'not actively seeking work or training' without good reasons, (such as being pregnant, illness, looking after a child). This constituted only 2% of those entering the labour market - hardly evidence that the City's school-leavers did not want to work. A very small 'hard core' indeed.

Specifically on apprentices, Buckley (1977) discovered that:

'Apprentices were by far the least troublesome of all young workers and most of the personnel managers or training officers were **very satisfied** with their attitude to work.' (p.7 - my emphasis).

In its 'Jobhunter' newspaper for the young people, the CCS made it clear that it felt young people wanted to work. In a response to an article in the 'Coventry Evening Telegraph' (CET:9/3/1979), raising the question of young people not making enough effort to find work, the 'Jobhunter' pointed out that young people did clearly want to work as 1,600 were on the YOP (Jobhunter:20/3/1979). Other articles in the 'Jobhunter' also made this point (for example, Jobhunter:20/3/1978). The Chairman of Coventry Education Committee also argued that young people wanted to work (Jobhunter:5/12/1979). Yet engineering employers were adamant that young people in Coventry did not want to work, and pointed to unfilled apprenticeship vacancies as proof (CET:16/7/1978). In response to complaints by engineering employers, Ted Herbert, Principal Careers Officer, said that

he was 'fed up' with firms saying that they could not get enough apprentices. He pointed out that the Careers Service was co-operating closely with the CDEEA and the Coventry Chamber Of Commerce in a campaign to get all engineering vacancies filled (Jobhunter:31/7/1979). The campaign resulted in 296 enquiries. A similar campaign the following year (Jobhunter:19/8/1980) led to 286 applications. In 1981, the campaign identified 150 young people, who passed a standard recruitment test in engineering used widely in the City, to fill only 30 EITB sponsored places (Crisis Group:1981). Herbert added that from those identified as eligible for engineering in the 1979 campaign he could fill every apprenticeship still vacant in the City (Jobhunter:14/8/1979). The 1980 campaign was more aggressive, throwing:

'...down a challenge to Coventry employers: before you join the current popular trend criticising school leavers for not being keen enough to get jobs - contact us. We meet any number every week who are ready, willing and able to work.' (Jobhunter:19/8/1980).

This did not stop the local office of the EITB from complaining about the difficulties of recruiting young people for First Year Apprenticeship Training Awards the following summer, but the CCS countered such arguments by pointing out the numbers of young people on the YOP (Jobhunter:25/8/1981). Clearly, the comments on young peoples' work attitudes coming from the CCS must be seen in the context of trying to keep them motivated to find work and to give a favourable impression of young people to employers. Both strategies were connected with the placement function of the CCS. Nevertheless, CCS rhetoric concerning the work attitudes of young people in the City was not empty, as can be seen from the evidence of the engineering apprenticeship campaigns. The Chamber of Commerce also shared the CCS view that young people in Coventry wanted to work (CME:7/1980).

Whilst there were only a handful of CEES employers who said that the attitudes to work of young people had deteriorated, only one of the Coventry employers pointed to them getting better. However, it must be noted that there was no systematic questioning of the employers on changes in the

attitude to work of young people. But certainly it was not a topic provoking many unprompted responses as had occurred with young peoples' lack of interest in engineering and other factors.

Carrymore Ltd. from the Pilot Study suggested that there had been no change at all in attitudes to work amongst young people, for:

'Attitudes don't change, I think. It's just conditions that change. Youngsters of today..[silence]..in their attitudes to work, haven't appeared to change much over the last five years...Once they get into the work situation the majority of them become quite happily adjusted, and settle in to the routine.' [Research Notes,Pilot Study]

The main condition that had changed was the massive rise in youth unemployment leading some of the CEES sample firms to say that they were 'spoilt for choice' when recruiting apprentices. An article in the local paper noted that firms were being '...inundated by despondent, unemployed young people looking for work.' (CET:6/7/1977).

Overall, this evidence suggests that Coventry school leavers wanted to work and made strenuous efforts to find work. However, it appeared from CCS data that young people were not choosing to go into engineering in sufficient numbers. When clear opportunities were presented to them, such as in the campaigns run by the CCS, then they came forward, passed selection tests and filled all available vacancies in engineering apprenticeships. Yet the next section suggests that some of those responding to the CCS campaigns and passing employers' tests may have been doing so out of desperation for work rather than through love of engineering. Incidentally, evidence from the CEES suggests that these so-called unfilled apprenticeship vacancies were merely places that had been turned down by young people as they had accepted more than one place offered by employers.

(iv) Some Findings from the Apprentices' Study

In the Apprentices' Study at MGTS, 107 apprentices were asked how they became interested in engineering. When they mentioned more than one influence on the development of their interest then they were asked which

factor influenced them most. Thus, the factors pertaining to their development of an interest in engineering could be split into 'main' and 'other' influences. The results are summarised in Table 12.1. Table 12.1 shows that the home and family (including relatives), and school provided most of the stimulus for the apprentices in my Apprentices' Study to want to enter engineering. Within these categories of factors, 8.Family and Relatives and 14.Metalwork at School were by far the most important single influences. Table 12.1 shows that the Careers Service played a relatively small role in stimulating an interest in engineering.

The most surprising finding, perhaps of my whole fieldwork, was that 21 (a fifth), of the apprentices said that they were not interested in engineering. This was unexpected; they had gone through MGTS interviews and tests and also their firms' selection procedures. They were only a few months into their apprenticeship when interviewed. From what they had told me it was not the case that they had experienced rapid disillusionment; for the majority of those saying they were 'not interested' engineering was a second choice career. They had had no illusions about it, and had either taken the job because any job was better than none, it was a second choice after many attempts to get into their first choice, or they were 'pushed' into it by parents. Sixteen out of the twenty-one, (76%) said engineering was their second choice - although for three of these it was not the case that they 'chose' it at all; their parents made them do it. The first choice careers of the 16 were:

Motor Mechanic	(4)
Electrician	(3)
Plumbing	(2)
Merchant Navy	(1)
Police Force	(1)
Hotel Management	(1)
Sales and Marketing	(1)
Chef	(1)
Artist	(1)
Farming	(1)

Most of these 16 young people had made strenuous efforts to get into their first choice careers:

'I've always liked to be a motor mechanic. I applied to lots of garages, but didn't get anywhere. It's very difficult to get an apprenticeship in the motor vehicle trade - so I became an engineering apprentice. One of my friends wanted to become a motor mechanic, and he applied to about a hundred places, but didn't get anywhere - nobody was taking on apprentices.' [No.6,craft:Research Notes].

and

'I didn't...[become interested in engineering: GR]...I wanted to be an electrician, and I tried for lots of electrician's jobs, but they kept saying that they didn't need any electricians. So then I decided I'd go into toolmaking.' [No.92,craft:Research Notes].

These examples were typical of the 16 young people who wanted careers other than engineering, and their experiences confirm our earlier analysis; compared to other skilled trades in Coventry engineering was still relatively easy to get into.

The other five apprentices were persuaded to go into engineering by their parents. Two out of the five had no particular career choice. One of these lads clearly resented being pushed into it by his Dad:

A It was me Dad...he's an engineer, and he wanted me to be one. I didn't. He convinced me by telling me that he could get me a job in engineering.

G When did he convince you, when you were in the fifth year?

A Yeah.

G But now you're in, do you like it ?

A Not really. I'm not doing very well.

G Do you think you'll stick it?

A I don't know. When I first came here I didn't have a clue. You see, I only did Metalwork in the first three years at school, but I'm getting used to it now. [No.54,craft:Research Notes].

Research notes pointed out that: 'No.54 communicates a deep sense of not bothering, disillusionment, verging on despair. He looks depressed.'. He seemed totally unsuited to the work.

Of the others, one was persuaded into engineering on the basis that his Dad could get him a job (which was not true, but after a talk with his boss at the engineering firm where he worked his father went to MGTS and helped arrange an EITB First Year Apprenticeship for his son, No.46). No.50's parents persuaded him that you '...need a trade..[and]..engineering was a secure job.' [Research Notes] , as opposed to No.50's first choice of Hotel

Table 12.1 : FACTORS STIMULATING AN INTEREST IN ENGINEERING AMONGST 107 MGTS APPRENTICES

FACTORS STIMULATING AN INTEREST IN ENGINEERING	MAIN FACTORS		SECONDARY		ALL FACTORS	
	No.	%	No.	%	No.	%
1. Careers at School	5	6	3	5	8	6
2. Careers Service	0	0	7	12	7	5
3. Chemistry at School	1	1	0	0	1	1
4. Coventry - 'An Engineering Town'	1	1	2	3	3	2
5. Dad's Firm - visited in holidays	1	1	2	3	3	2
6. Didn't like 'A' level	1	1	0	0	1	1
7. Engineering firm near home	1	1	1	2	2	1
8. Family & Relatives	27	32	12	21	39	27
9. Friends & Neighbours	1	1	3	5	4	3
10 MGTS talk at School	0	0	1	2	1	1
11 Hobbies/Interests	2	2	3	5	3	2
12 Likes working with Hands	0	0	3	5	3	2
13 Likes working with Hands & Brain	0	0	2	3	2	1
14 Metalwork at School	35	42	7	12	42	30
15 Metalwork Teacher	1	1	3	5	4	3
16 Money good in Engineering	1	1	0	0	1	1
17 Preparation for life course	0	0	1	2	1	1
18 'Rational Choice'*	2	2	0	0	2	1
19 Reading at Home	1	1	2	3	3	2
20 T.D. at School	0	0	2	3	2	1
21 Watching TV	0	0	1	2	1	1
22 Work Experience	2	2	2	3	4	3
23 Working p/t in Eng. in hols.	2	2	1	2	3	2
TOTAL (See Notes)	84	97	58	98	142	99

Notes: The data excludes 2 who did not know how they became interested and 21 (20%, n=107) who were not interested, leaving a total of 84. *All available jobs were considered and engineering chosen.

Management. No.51's interest in bikes could be satisfied if he went into engineering - according to his Mum. The other one of those not interested only went into it because his mates at school had been interested in it, and he wanted to avoid going into '...staff, clerical, or anything like that.' [No.76,craft:Research Notes].

Only two of those not interested in engineering did not either face parental pressure or see it as a second choice, (or both of these). No.68 was advised by his Careers Officer to apply for engineering jobs as well as for

plumbing, especially as No.68 had started to apply for plumbing apprenticeships very late in the academic year. The other one, No.27, only went into engineering apprenticeship out of loyalty to his Housemaster who '...got it for me really.' [Research Notes]. Ideally, No.27 would like to have worked in a record shop, and had once thought of being a 'rock star', but felt that he would nevertheless put some effort into his apprenticeship because his earlier rock ambitions were 'just dreams'. Finally, the other apprentice not interested in engineering really wanted to go into telecommunications, (which he did not see as 'engineering').

Apart from the 21 apprentices who said they had not become interested in engineering, another one had only become interested in it after receiving a lot of rejections for bricklaying apprenticeships and from receiving encouragement from his Dad. Add this one together with the two that 'Didn't know' how they became interested, one who only went into it because his mates were at the MGTS, and finally one who went into it just for 'the money', and another lad who felt there was little choice as Coventry was 'an Engineering town' - to the 21 not interested - then a quarter of them had entered entered engineering with a low level of commitment.

Furthermore, there were some included in the interested category that seemed rather dubious - No.26 said he did not get the qualifications for the jobs he was really interested in '...whereas for engineering I'd be alright' [Research Notes]: No.38 was originally interested in carpentry, but 'had no luck' in carpentry applications, whilst No.55:

'...was always interested in banking and commerce,..but engineering is sort of me,..(as a lot of people in my family are in engineering),..and if I don't like it later on then I can always leave and do something later.' [technician:Research Notes].

It must be stressed that these were youth that had jumped all the selection hurdles, and given these findings one can see why the CEES employers were concerned about interest in engineering. There was no evidence from the Apprentices' Study to suggest that they did not want to work; the problem was that for a significant minority they did not want engineering. There was not a general problem of attitude to work but a specific problem of attitude

towards working in engineering.

On the MGTS application form there was a section where applicants were asked to: 'Write in this space why you are interested in a career in Engineering or Office Work'. MGTS also ran an office skills course and the application form was a standard one. I wrote the answers down for 101 MGTS apprentices; (Minex Technicians did not fill it in). It should be remembered that these were public statements to prospective employers and the MGTS itself; the applicants were involved in 'selling themselves'. The actual question asked was different to the one I had asked in relation to Table 12.1; saying why you are interested in engineering in general is different to pinpointing the specific influences that stimulated such an interest in the first place. The results derived from analysing the answers were revealing.

Seven out of the 101 gave no answer at all, and No.27 did not want engineering at all in his answer:

'I am interested in a career in Office Work as I expect to gain sufficient examination results to suit this work. I would prefer Office Work to Engineering.' [technician:Apprentices' Records].

No.68 made a slip when he explained that he 'chose plumbing' but went on to explain that he liked metalwork at school. Of these nine, five of them were amongst those not interested in engineering. Not being able to think of why they were interested - even for the purposes of conning employers - signals either simply forgetting to fill in the section (itself a sign that they did not bother much with the application), or a very low level or no interest at all. To argue the case for office work was asking not to be taken on - but then, No.27 did everything to avoid being recruited. Certainly, these findings further support the argument that engineering employers in Coventry did have a problem in finding young people with sufficient interest in engineering. The important question is: Why did some engineering employers take on youth who could not be bothered to write down why they were interested in engineering? This question will be pursued in Part Four.

The overall analysis of their written reasons for wanting engineering shows that they centred their reasons around the jobs they would be doing.

Practical aspects of the job accounted for 30% of all reasons given; the fact that they had liked relevant subjects at school (20% of reasons) and the job satisfaction involved in engineering (12% of reasons) were the three most prominent categories. Reasons relating to home and family (including hobbies) accounted for only 7% of all reasons.

(v) Interest in Engineering: Employers' Explanations

Clearly there was a problem of lack of interest in engineering amongst school leavers in Coventry. What explanations did local employers give for this lack of interest? We have already noted Frith and Buckley's (1978) findings where the explanations given by the CDEEA centred around able pupils choosing alternative careers (which was a symptom of the problem), and industrially ignorant teachers not selling the engineering industry. On the latter, specific research would be required to determine the attitudes of Coventry teachers to industry and engineering. But certainly, as shown in previous chapters, the LEA, the City Council, the Director of Education and particular Heads seemed more than willing to agree with engineering employers' criticisms of school leavers and collaborate in practical measures to meet their demands. Classroom teachers may have different perspectives; only further research could decide. The CDEEA provided no real evidence that Coventry teachers were anti-industry.

The Coventry Chamber of Commerce related in 1985 that:

'Although industry is expected to recruit more apprentices this year, it is anticipated there will be difficulty in finding good calibre youngsters who may prefer to stay at school rather than opt for industry.' (CME:3/1985)

In a similar vein the personnel manager at Alfred Herberts Machine Tools in Coventry argued that the clever kids were creamed off for the sixth form as: 'You go instantly into the middle class that way', hence Herberts made the 'best of those who apply' (Guardian:30/7/1977). There was some evidence for this belief. The fifth year group staying-on rate for further full-time courses rose from the mid-1970s to the early 1980s, as Tables 12.2/3

Table 12.2 : PERCENTAGE OF FIFTH YEAR GROUP RETURNING TO STUDY IN THE SIXTH FORM AT SCHOOL OR TO GO ON TO FULL-TIME F.E. COURSES

YEAR	% ENTERING 6th FORM	% GOING ON TO F/T F.E.
1984	28	10.5
1983	25.5	12.5
1982	26	13
1981	24	15
1980	23	11
1979	22	11
1978	23	13
1977	22	12
1976	21	13
1975	22	9

Sources: Coventry Careers Service, Annual Reports.

indicate. The 1980-82 recession had a substantial impact on staying-on rates. The CCS argued that a further consequence of the recession was a declining interest in engineering amongst the City's fifth year leavers, as:

'In the absence of jobs some school leavers base their occupational and training choices on interest and 'image'. Hence, only 34 of the unemployed fifth year pupils will at present admit to an interest in engineering manufacturing...If a revival of active job vacancies in engineering occurred it is likely more young people would 'convert' back from their current occupational/training stance.' (CCS:1982d,e).

Engineering employers saw the lack of interest in engineering as a deep-seated problem amongst Coventry's youth, dating to at least the early 1970s; it was not just a short-term reaction to the recession. Though job vacancies in engineering declined during the 1980-82 recession, a CCS document, compiled a few weeks before the above explanation of lack of interest in engineering was published, noted that 30% of 1982 fifth year leavers obtaining work entered engineering (CCS:1982b). Most of the electrical jobs were in electrical engineering firms; altogether a third entered engineering jobs. Engineering and electrical engineering apprenticeships accounted for 60% of all apprenticeships gained by 1982 fifth form leavers by October 1982. Relatively, engineering was still important in the Coventry youth

labour market in the early 1980s (Chapter Five).

Apart from the 'teachers against industry' explanation, the other explanations given by engineering employers and the CCS were dependent on conditions within particular periods. Yet the crisis of interest in engineering seemed an enduring feature. A more fundamental explanation was required. Of the employers' explanations the staying-on rate appeared to have the most substance. But the CDEEA argued that the problem was there in the early 1970s. Only in the 1980s did a significant shift take place in staying-on rates. The final section argues that the fundamental root of the problem was the structure of the youth labour market.

Table 12.3 : STAYING-ON RATES IN COVENTRY (AS A % OF THE YEAR GROUP)

YEAR	LOWER SIXTH	UPPER SIXTH
1977	21.0	14.3
1978	21.3	14.2
1979	21.7	14.6
1980	21.9	15.3
1981	25.3	15.9
1982	28.1	17.3
1983	28.8	17.7

Source: Education Service Statistics and Information Digest, Coventry Education Department Forward Planning Unit, 1984, 3.9.

(vi) Discussion: The Structure of the Coventry Youth Labour Market

Chapter Six provided a general explanation of the dominance of work attitudes. This dominance was, after all, a general phenomenon shown in numerous studies. Yet Coventry appeared to have a peculiar problem in relation to apprentice applicants which required an additional specific explanation. In engineering in Coventry, employers were much more concerned with specific work attitudes for apprentice applicants. Thus, the particular form, the enhanced importance of specific work attitudes, which the general dominance of work attitudes took in relation to engineering apprentice recruitment in Coventry required explanation. The crisis of interest in

engineering was real enough and was part of the general enhancement of the importance of specific engineering-oriented work attitudes sought in apprentice recruitment. Underlying this was the structure of the youth labour market in Coventry.

Chapter Five showed that engineering apprenticeships dominated in the structure of opportunity integral to the male youth labour market in Coventry. The lop-sided nature of this youth labour market forced male school leavers into drifting into engineering apprenticeships. For Coventry employers the problem was to ensure that 40-50% of young males in work were in engineering, were interested in engineering, and wanted to be in engineering. For apprenticeships, it was the case of trying to ensure that 60% of those going into them wanted **engineering** apprenticeships. It was no wonder that employers came across substantial numbers of engineering apprentices who were not interested in engineering. Why **should** such a large proportion of young people be interested in engineering? Were not engineering employers in Coventry collectively expecting the impossible? As the Apprentices' Study illustrated, a substantial minority took engineering apprenticeships because they had failed to get the job of their choice. This was not just because there were not many jobs about, although that was a factor. In the early 1970's, when there were more jobs for school leavers, one aspect of the employers' problem was still the same: how to ensure that about 60% of boys that entered apprenticeships wanted specifically **engineering** apprenticeships. In these circumstances employers' exhortations to teachers to be more aware of the engineering industry and effectively 'sell' it to local youngsters made sense. During the 1970s engineering employers and the Coventry LEA were fighting a propaganda war to get sufficiently interested young people into engineering apprenticeships.

The conclusion to be drawn from this is clear: given the lop-sided nature of the Coventry youth labour market and the perennial problem of attracting relatively large numbers of fifth form leavers (mainly boys) into engineering apprenticeships, then the employers' moans about lack of motivation and interest amongst entrants to apprenticeships in engineering are understandable. There was no 'hidden hand' to ensure that such a large

proportion of male fifth form leavers would want to go into engineering, and especially engineering apprenticeships. The propaganda war to try and ensure that all relevant agencies were attempting to create sufficient interest in engineering amongst young people was entirely understandable. From the young person's perspective, job choice was constrained, restricted and set around a narrow range of options. No doubt for some, living in Coventry was the problem. As one apprentice in the Apprentices' Study noted - 'Coventry: well, it's just engineering innit'.

From 1980 onwards the situation changed, yet the problem intensified. In one sense engineering employers were better off; as they cut the number of apprenticeships, and as youth unemployment rose, they had more choice. There were likely to be more well-qualified young people applying for engineering apprenticeships, although no doubt some of the better qualified who might have considered engineering if job chances were better stayed-on at school. Engineering employers were 'spoilt for choice'; the number of applications per apprenticeship rocketed, recruitment programmes were started earlier, cut shorter, and became more intensive to cope with the deluge of applications. On the other hand, undoubtedly some of those young people who might have found jobs in engineering were tempted to stay on at school to gain more qualifications as youth unemployment rocketed 1980-81. Tables 12.2/3 point to this. Furthermore, some young people who were not particularly interested in engineering nevertheless applied for apprenticeships in engineering because they realised (or were told by careers officers and teachers and parents) that they stood the best chance of getting a job if they were to go into engineering rather than their actual job choice. Where fathers and careers officers smoothed their way with the employer this argument gained added force. Hence, the problem of sorting out those who had a genuine interest in engineering apprenticeships from those that feigned an interest just to get a job or apprenticeship of any kind was intense for engineering employers 1980-83. For male fifth form leavers the structure of the youth labour market shifted further towards engineering in the early 1980s; the percentage of male fifth form leavers going into engineering jobs increased from 41-44% 1980-81, (excluding the

electrical group).

The fact that such a large proportion of fifth form leavers were required to go into engineering, and such a large proportion of those wanting apprenticeships were required to enter engineering apprenticeships, clearly exacerbated the engineering employers' problem of finding school leavers committed to the engineering industry. For many engineering firms it was a problem of getting boys interested in engineering as they were not interested in girls becoming engineering apprentices (Chapter Twenty-two). Fifth form male leavers were faced with more employment opportunities than their female peers, but these opportunities were constricted and constrained as far as job choice was concerned by a dominance of manufacturing jobs in general and engineering jobs in particular, skilled and semi-skilled engineering jobs especially and engineering apprenticeships in particular.

A general 'lack of interest in engineering' was engendered by this situation; an absolute lack in the 1970s when there were more alternatives and a relative lack of interest in the 1980s. On Finn's (1984) data, an estimate of 850 fifth year leavers wanting apprenticeships in 1981 was a reasonable proposition. Clearly, there were also young people living outside Coventry willing to travel in to work as engineering apprentices, (as was found in the Apprentices' Study), although this was partly balanced by Coventry youth going out to work for engineering firms in nearby towns. Thousands applied for engineering apprenticeships. Yet Finn's figures did not say how many of those wanting apprenticeships wanted specifically engineering apprenticeships. Data from the CCS on occupational preferences of unemployed fifth form leavers in 1982 shows that only a paltry 9% of these, (excluding electrical), and 10% (including electrical) wanted to go into engineering (Richards:1982b). Only 39 young unemployed 1982 school leavers actually wanted engineering jobs. Of course, these 39 were fully unemployed fifth form leavers and there were another 425 on engineering based YOP and Pilot YTS schemes (CCS:1983a). Taking into account the 211 fifth form leavers who had real jobs in engineering then only 675 either had an engineering job, an engineering training course or were unemployed but wanted to work in engineering. This seems low in comparison to reports of

thousands of applications for apprenticeships amongst large engineering firms. Obviously, some applications were from outside Coventry. Others were from those putting in multiple applications; it was the norm for the apprentices in the Apprentices' Study to apply to several firms. But even taking these factors into account the 675 hardly seems a firm numerical base from which thousands of applications at the large firms would flow. It would seem reasonable to suggest that there were many desperate fifth form leavers trying to get into engineering apprenticeships because they saw it as their best chance of getting a real job, not because they were committed to it. No other conclusion makes sense in relation to CCS statistics and Finn's (1984) research.

There were enough qualified young people to fill engineering apprenticeships. Not enough of them wanted to do engineering. It cannot be denied that the 'image' of the industry played a part (especially reports of engineering firms going bust and redundancies being announced in the local TV and press in 1980-81), and that some fifth formers' overall interest in engineering may have been dampened by a realisation that there were few jobs about of any sort in 1980-81. But underneath this was the basic fact that school leavers had to come to terms with a peculiarly constricted youth labour market. Their 'choices' of jobs had to be set against a labour market where manufacturing and especially engineering were dominant. Competition for jobs in this relatively large sector of what was left of the Coventry youth labour market in 1980-81 reached desperate heights. An engineering job was better than no job at all; there lay the roots of lukewarmness towards entry into engineering apprenticeships. Employers had the problem of sorting out those with 'genuine' interest. The structure of the local youth labour market in Coventry was a breeding ground for producing applicants for apprenticeships who were not keen on engineering. Employers blamed the young people themselves, the schools, teachers, the local media or union militants for this state of affairs - none pointed to the structure of the youth labour market. Coventry was an engineering town; this fact in itself could not guarantee that sufficient school leavers would be sufficiently engineering oriented. They had to be persuaded.

What this chapter shows in more general terms is that the dominance of work attitudes as attributes sought in applicants in recruitment assumed a particular and peculiar form in relation to the recruitment process for engineering apprentices in Coventry. The structure of the Coventry youth labour market engendered a situation where engineering employers placed greater emphasis on specific work attitudes in recruitment relative to general work attitudes as compared with employers in youth labour markets where job choice was not so constricted. This can be seen in Appendix 7, where Cuming's Leicestershire employers placed a greater emphasis on general rather than specific work attitudes as compared with CEES employers. This raises a general hypothesis, (which could only be tested by further research): that the structure of youth labour markets determines the form in which the dominance of work attitudes in recruitment of youth manifests itself. In particular, it determines the relation between general and specific work attitudes.

Chapter ThirteenRECRUITMENT METHODS: INTERVIEWS, ATTITUDES AND PERSONALITY TRAITS(i) Introduction

Part Two of the thesis focussed on the criteria of recruitment, especially the attributes sought in applicants in recruitment. As against those who argued that employers' criteria, their 'needs', were confused, contradictory and unknown (Chapter One), it was argued (Chapters Seven, Eight), that in general, and on the whole, recruiters kept their labour processes firmly in view in the recruitment process. The contradictions and inconsistencies arose not from the recruiters being inconsistent and contradictory in their statements of criteria and attributes sought, but from contradictions flowing from the nature of labour power itself, its essential aspects. Recruiters were not irrational, injecting their whims, fancies and delights into the criteria used and attributes sought. They were hard-headed and related these to their own labour processes. However, when the criteria and attributes of various CEES employers were counterposed there were apparent contradictions and inconsistencies. But this was based on a forced empiricism; wrenching these criteria and attributes out of their social context (individual capitals) and comparing them within the sphere of the engineering sector of capital. These apparent inconsistencies rested on different ways of coming to terms with contradictions within labour power and different managerial strategies within the labour process aimed at resolving the contradiction between the exchange and use value aspects of labour (Cressey and MacInnes :1980). They also flowed from differences in the labour process (the product, technologies used and so on) resulting in different, seemingly contradictory, attributes being sought. These were different ways of coming to terms with the deeper contradictions analysed in Chapter Six.

Yet something appeared to be amiss even at the level of immediate appearances. There was a hint of this in the last chapter when one of the MGTS technicians was recruited despite putting that he wanted office work on

his form - unless the firm in question saw being a technician (maybe a draughtsman) as merely a species of office worker, then there was no inconsistency. Clearer cases were MGTS apprentices who said they were not very good at engineering, were in fact not very good, had not been interested in it at the point of recruitment, and looked clearly unsuitable for the work. What was happening here? Explanations favourable to the rationality of employers might centre around the crisis of interest in engineering (Chapter Twelve), or the failure of schools and the CCS to give adequate careers advice, or the general shortage of quality youth brought about by the increase in the staying-on rate, or generally poor schooling and comprehensivisation, or parents pushing young people into apprenticeships. But these explanations fail to account for some awkward facts which will be revealed in Chapter Fifteen and the whole of Part Four. These facts centre around glaring inconsistencies between recruitment criteria and attributes sought in applicants, the methods used to assess these and recruitment channels (Wood:1988).

In this chapter however, the CEES employers are consistent. It is shown that in general terms there was a close fit between the attributes sought in applicants and recruitment methods. Work attitudes and personality traits were the most important attributes sought, the interview was the most important method of recruitment, and this was basically about measuring and assessing these crucial attributes. A neat consistency. In general terms, the attributes sought in applicants by CEES employers' and recruitment methods seemed in harmony. This chapter illustrates this simple point.

Recruitment methods here means the ways and procedures through which applicants are assessed and the specified attributes measured and gauged. This is a different usage than in much of the literature. Writers such as Oxenham (1984) and Risk (1987) note a distinction between recruitment and selection. The former refers to the particular channels used (careers office, local press and so on) which bring applicants to the firm prior to the selection process. Thus, Risk (1987) argues that recruitment:

'...can be viewed as a social process, prior to selection, involving recruitment methods which catalyse the coming together of young people

and recruiters.' (p.297).

It is what brings employers and applicants together; then selection takes place and applicants are assessed. Yet this seems an artificial distinction which blurs the point that, in specifying and using particular recruitment methods (in Risk's terms), the employer also selects. We see this in Part Four. For example, recruitment through informal networks (workers and employers relations and friends) may involve selection along racial criteria if all the workers are white. More generally, it discriminates against those outside the informal network. It is indirect selection. The approach taken here cuts through this artificial and unhelpful distinction. The recruitment process involves the following: first, the recruitment criteria, (which, as we have already seen, incorporates attributes sought in applicants and labour power attributes), these are what are sought; secondly, there are the methods (interviews, tests, school reports, and so on) used to assess and gauge the recruitment criteria; and finally, borrowing from Wood (1988) and Windolf and Wood (1988a), there are what they call recruitment channels (the use of the careers service, informal networks, advertising and so on), the processes which bring recruiters and applicants together. The recruitment process covers all three elements, not just the second as Risk (1987) has it. Wood's (1988) distinction between channels and methods is a major step forward in the analysis of the recruitment process and it gets over the problem of viewing selection as something other than recruitment. On this basis interviews are recruitment methods.

(ii) Selection Procedures and the Importance of the Interview

'The main test for entry [to craft apprenticeships in engineering]...is by interview, on which the candidate's ability and interest in his chosen career can be assessed.' (Sterland:1966,p.66).

CEES firms were asked which element played the most decisive role in the selection of applicants. As Table 13.1 shows, the interview clearly played the most decisive role in recruitment, for all sizes of firm. Group A firms relied on it more than any other size group, but even group D firms had two-

Table 13.1 : THE MOST IMPORTANT ELEMENT IN THE SELECTION OF APPRENTICES - BY SIZE OF FIRM - PERCENTAGE MENTIONING THE VARIOUS ELEMENTS

FIRM SIZE	GROUP A up to 50 (n=49) %	GROUP B 51-100 (n=13) %	GROUP C 101-500 (n=25) %	GROUP D 501-1000 (n=10) %	GROUP E 1001+ (n=10) %	ALL FIRMS (n=107) %
Most important element						
Interview	77	69	51	67	53	67
Tests	4	8	25	10	10	11
School Report	10	8	8	0	0	7
Factory Tour	0	8	4	0	0	2
School work ^a	0	8	4	0	0	2
MGTS Report	2	0	0	0	0	1
First Impressions ^b	2	0	0	0	0	1
Examinations	2	0	0	4	5	2
Interview & Test =	2	0	0	10	20	4
Other combination	0	0	4	0	0	1
A 'Total Process' ^c	0	0	0	10	12	2
Don't know	0	0	4	0	0	1
TOTALS	99	101	100	101	100	101

- Notes:**
- Examples of metalwork done at school and brought to the interview.
 - Mainly appearance, but also 'bearing' and if they 'look keen and enthusiastic'.
 - These firms argued that elements could and should not be separated out; they were all part of a 'Total (recruitment) Process'.
 - Where firms differentiated as between craft and technician a proportion of 1, based on the proportions of craft/technician apprentices within the firms were allocated to the appropriate elements. The following firms differentiated:
 - Arc Metals & Plastics Ltd.: Interview for craft; Tests for technicians.
 - Olmec Machine Tools Ltd.: Interview for craft; Tests for technicians.
 - Minex Communication Systems Ltd.: Total Process for craft; Interview for technicians.
 - V. Broughton (Machine Tools) Ltd.: Interview for craft; Examinations for technicians.

thirds of respondents saying that the interview was the most important

element. In all, two-thirds of the CEES sample said the interview played the most decisive role in recruitment; it was of tremendous importance - six times more important than the second most important element, the tests.

Of the other elements only the school report played a significant role. Examinations played a minor role and projected grades were not even mentioned. This reflects Frith and Buckley's (1978) observation; qualifications were nebulous as exam results were unknown when young people were taken on. The MGTS report also got short shrift. Indeed, in general CEES employers seemed to rely on evidence that was not 'second hand'. Nearly all the firms that mentioned tests were non-MGTS firms who ran their own tests. Thus, they seemed to want to rely on either evidence of learned skills that they had constructed and interpreted themselves, or to find out about the applicants in the most direct way possible; the interview.

The employers were asked how long the interviews lasted on average. If they had more than one interview then they were asked how long the first interview lasted. Table 13.2 shows that most firms, just over a half, went for interviews lasting between 16-30 minutes. Only small group A firms went for very short interviews of 15 minutes or less to any significant extent. On the other hand, three of the five firms that had very long interviews of over an hour were group A firms. Large group D-E firms avoided interviews of more than an hour. This was due to the numbers of applicants they interviewed. Firms that said they did not know how long the interviews lasted all had interviewees who had just started apprentice recruitment.

Data was also gathered on the number of interviews conducted by CEES firms for apprentice recruitment. The two-interview situation was the most common, except for small group A firms, where the one-interview approach was marginally more popular. Between 54%(group B) and 70%(group E) of firms had two interviews. For group A firms, 45% had only one interview and 43% had two interviews. In general, the larger the firm the more likely there would be two interviews rather than one. Interestingly, none of the group E firms had more than two interviews. This fact, together with the importance of one-interview recruiting for group E firms was a reflection of the large

Table 13.2 : LENGTH OF (FIRST) INTERVIEWS : PERCENTAGE HAVING FIRST INTERVIEWS OF VARIOUS LENGTHS - BY SIZE OF FIRM

SIZE OF FIRM Length of First interview (mins)	GROUP A up to 50 (n=49) %	GROUP B 51-100 (n=13) %	GROUP C 101-500 (n=25) %	GROUP D 501-1000 (n=10) %	GROUP E 1001+ (n=10) %	ALL FIRMS (n=107) %
Up to 15mins	18	8	12	0	10	13
16-30mins	55	38	52	50	60	52
31-45mins	8	8	12	40	10	12
46-60mins	6	31	12	10	20	12
61+mins	6	8	4	0	0	5
Don't know	6	8	8	0	0	6
TOTALS	99	101	100	100	100	100

numbers interviewed. In Minex the number of applicants interviewed for technician apprenticeships dictated that only one interview could be given. Yet the personnel involved in craft recruitment at Minex, (who were not the same as those involved in technician recruitment) could afford to give two interviews for a much lower number of applicants for much fewer apprenticeships. Large firms were likely to have more background knowledge as they conducted tests and used school reports to a greater extent.

(iii) Questions in the Interview; It's Just A Chat

The CEES firms were asked if there were any questions that they 'usually asked' applicants for apprenticeships. Nearly a half of all group A firms had standard questions, four fifths of large group E firms did and between a third and two fifths of group B-D firms had standard questions. Overall, 48 firms (45%) had some questions which they usually asked applicants.

Small firms not having standard questions commonly pointed out that the interview was 'just a chat', not particularly structured with 'set questions'. This was partly due to the fact that they did not have the resources, especially the skilled interviewers, available in larger firms. Atkinson Engineering (Designs) were almost apologetic on this score:

'Not really, no,..[they did not have standard questions:GR]..not really. It seems, (this might seem a little slap-dash to you), but we haven't got the set-up as the larger firms have, you know. So a lot of it is your own personal feelings about the lad, er, but there's no general set questions; it's just a chat.' [Research Notes, employer's emphasis].

However, for the majority of small firms the policy of 'just chatting' seemed quite deliberate and thought-out, and not just a second-best to the more structured interviewing of the larger firms. These firms believed that unstructured interviews were effective in ascertaining applicants' attitudes to work or their personality and character. To just 'get them chatting' was the main objective, and different questions would be tried on different individuals. As Trinity Patterns put it:

'I can't think of any specific questions. We tend to go on personality. We ask questions t'try t'bring the person out, to talk about himself, as much as possible,..' [Research Notes, employer's emphasis].

The point of the interview was to gauge an applicants's personality rather than to find out anything more specific. It was also argued that this method was less intimidating than firing out set questions and some young people were nervous in the interviews. This approach put them at ease. A general chat approach had more success in getting the nervous type of lad to talk.

Furthermore, small and medium-sized MGTS firms argued that there was little need for detailed specific questions as most of the relevant information was in the MGTS reports. The MGTS firms commonly used the MGTS reports to construct questions that they believed would yield insight into work attitudes and personality. As individuals differed according to these reports so would the questions - hence in a way their approach was more thorough and systematic than the larger firms; questions were tailored to individuals based on information from the MGTS reports. Basic information and specifics were left to the MGTS.

For those firms that had no standard questions the interview was primarily a 'general chat' designed to yield a general impression about the applicant's work attitudes, personality and character. The emphasis was on intuition, although with MGTS firms this ultimately rested on a judicious choice of questions based on the MGTS reports. It was more about gut feelings rather than on specific facts about individuals. These facts had to be placed within the context of the overall intuitive and general feelings about an applicant before they could be relied on. As S.D. Machine Tools noted, the fact that an applicant was good at being interviewed said little about his suitability directly. This had to be set against his desire to want work in engineering, and this could only be ascertained through getting a general impression. S.D. Machine Tools thought the factory tour was very useful on this. The reactions of the applicant to the working environment could be observed and discussed and an overall impression gained.

(iv) The Hobbies Get them Talking

The 48 firms using standard questions were asked to say what these were. Five types of questions dominated the findings. First, questions about hobbies, interests and sports were very common; nearly a half (46%, n=48) of all firms had questions on these, and four-fifths of group D-E firms had questions on hobbies, interests and sports. Talking about hobbies, sports and interests was felt to be a good way of getting young people to open up and talk about themselves. As they did this their work attitudes, social attitudes and personality were being assessed.

The second most important topic of standard questions was the subjects studied at school, especially those subjects which were being done at CSE or GCE 'O' level. Nearly a third (31%) mentioned this. The main emphasis was on whether the applicants were still doing those subjects for exams which they had originally put down on their forms and also general enquiries as to how they were doing in those subjects. On the third most important subject of questions, family background, the emphasis was on the occupations of parents, (especially fathers), and siblings, and also whether parents were

keen on the applicant entering engineering. The fourth topic was designed to test interest in engineering, a specific work attitude. Applicants were asked directly 'Why are you interested in engineering?'. Just over a fifth, (21%) asked this standard question. Finally, nearly a fifth (19%) asked questions on maths. These questions were of two types; first, actual maths (more precisely arithmetic) questions were asked in the interview, and secondly enquiries into what applicants had learnt in maths, especially in the final year and more general questions about how good they were at maths at school and if they liked the subject. None of the other types of question were asked by more than 13% of the 48 firms with standard questions.

(v) The Questions in the Interview - the Apprentices' Recollections

In the Apprentices' Study, the apprentices were asked what types of questions they were asked in their interviews. Admittedly, for some of the 99 apprentices, (the results excluded the EITB lads as I was interested in the questions employers asked), there was a considerable gap between the interview with their firm and my interview with them. A few said they found it difficult to remember. In the event these results probably reflected those questions which had remained prominent in the apprentices' memories, and hence are to be treated with circumspection.

Nevertheless, the results generally supported the employers' account of the questions asked. This was despite the fact that the employers' had to specify those questions they always asked, whereas the apprentices specified any they could remember from the total range of questions asked. Furthermore the samples were different; some of the apprentices in the Apprentices' Study were with firms not in the CEES, and obviously there were no large group E or non-MGTS firms involved in the Apprentices' Study, excepting the eight Minex technicians.

The results in Table 13.3 show that, as with looking at the interview from the employers' perspective, hobbies, interests and sports featured prominently. Nearly a half of all the apprentices interviewed said they had had questions on hobbies, interests and sports. The most extreme level of

Table 13.3 : TYPES OF QUESTIONS ASKED IN THE INTERVIEW (TOPIC/SUBJECT) TO 99 MGTS APPRENTICES - ORDER OF MAGNITUDE - ONLY THOSE TOPICS/SUBJECTS REFERRED TO BY MORE THAN 5% INCLUDED

TOPIC/SUBJECT OF QUESTIONS	As % of all MGTS apprentices (n=99)
1. Hobbies/Interests & Sports	46
2. Why do you want to be an engineer? ^a	32
3. Family background ^b	25
4. Subjects studied, grades expected ^c	23
5. Spare time ^d	13
6. Maths ^e	10
7. The firm	9
8. The job: why he wanted it	7
9. School (Generally) ^f	7
10 Reading drawings/Technical Drawing	5
11 Metalwork at School	5
12 Interest in the Trade	5

Notes: a. Also why you do you want to go into engineering.
b. Especially parents occupation.
c. Included questions on whether they liked these subjects and how well they thought they were doing in them.
d. A general question 'What do you do in your spare time?', not necessarily directly related to hobbies and interests.
e. Actual maths questions as well as general questions on how they were doing in maths at school.
f. Mainly questions on whether they liked school.
There were 34 topics/subjects in total.

importance given to hobbies, interests and sports was discovered at Associated Panels. Interviews with apprentices from Associated Panels suggested that playing sport was almost a prerequisite for acceptance on apprenticeships. According to apprentice No.12, if you emphasised a commitment to the 'sporting life' you were virtually in. All the other Associated Panels apprentices corroborated this evidence. However, the interview with the Associated Panels interviewee, did not reveal sports as being the main criteria of recruitment. But then, what apprentice recruiter in a large group D firm would admit to placing such importance on sports? This raises a more general issue about what the employers in the CEES were

willing to admit to me in general regarding their criteria of recruitment. This general issue will be discussed in Chapter Twenty-two.

The stock question: 'Why do you want to go into Engineering/Be an Engineer?' figured more prominently in the apprentices' account of the questions in the interview than in Section (iv). Family background played a similarly prominent role. However, only 14 out of the 99 apprentices said that one or both of their parents came to the interview. A smaller percentage of the apprentices in Table 13.3 said that they had been asked about subjects studied than firms who said they had it as a standard question according to the employers. Finally, maths played a slightly less prominent role on the apprentices' account of the questions in the interview as compared with the employers' account. Overall though, there was considerable overlap between the top subject/topic areas.

(vi) Work Attitudes: the Evidence

MGTS employers were also asked how they knew that applicants had a 'good attitude to work'. The interview was of overwhelming importance, and it was mentioned by just over half (53%, 25 firms, n=47) of MGTS firms. Firms mentioning the interview typically argued that you could get to know what a lad's attitude to work was like by 'just talking to him'. The employer could see if he looked keen, if he asked pertinent questions, how he reacted to questions and statements and whether he just 'looked' as if he was a trier. Those who answered questions in a dull tone, or who clearly were not listening to them were classed as not being interested in the interview and hence not in the apprenticeship. Such youth would have poor work attitudes, it was argued. Blackburn and Mann (1979) found that adult workers in Peterborough were also judged on their co-operative attributes in the interview by the extent to which they listened to the recruiter.

Apart from the interview only school reports and whether applicants had any hobbies and interests played a significant role - both were mentioned by 15%. None of the other methods of ascertaining whether applicants had a good attitude to work were mentioned by more than 5% of MGTS firms except the

factory tour - 9%. The second most common response was that you just could not know if an applicant had a good attitude to work prior to recruitment. Eight firms took this view (17%). As Metagear Machines said; 'it's a risk.' It was something that you took a chance on. However, the main point was that the interview was of crucial importance in assessing work attitudes.

(vii) Discussion: Interviews, Attitudes and Personality Traits

All CEES employers conducted interviews when they recruited apprentices. To recruit without interviewing applicants was unthinkable. Windolf (1988c) noted the same propensity to rely on the interview in the recruitment of adult workers. The reliance on the interview has often been castigated as a symptom of the general unsystematic nature of youth and adult recruitment. These related views have a long history in the literature.

Williams (1957), talking about apprentice recruitment methods in the 1920s, argued that they were almost nil (p.15). There was reliance on how fit and healthy a boy looked in the interview, and that they were not obviously 'mentally defective' (ibid.). These boys typically came from employees' families or personal recommendation by employees (ibid.). Williams found that in engineering in the 1950s recruitment methods for apprentices were little different from the 1920s. In the 1930s the Clerk Report (1931) noted the unsystematic recruitment methods of engineering employers, often based on ignorance of what was happening in the schools (p.5). Liepmann (1960) noted little standardisation and systematisation in apprentice recruitment in the 1960s. Carter (1962), in his Sheffield study of the transition from school to work, pointed to the ad hoc nature of recruitment. Liepmann noted a 'casual attitude', and an '...indifference towards young employees.' (op. cit.p.177). Lee's (1972) study of small engineering firms found that as so few apprentices were recruited there was no stringent selection procedure.

Wood (1988) has noted the reliance on the interview and custom and practice in recruitment methods in the 1980s amongst the personnel managers he studied. This has persisted despite the increase in trained personnel and training staff, the proliferation of professionalism - the rise of the

personnel manager - professional courses and qualifications and textbooks stressing professional recruitment models. Wood (1988) argues that the textbook models of how recruitment ought to proceed (on the basis of efficiency and fair selection and deriving from the Taylorist scientific management tradition) stress rigid procedures involving defining requirements, attracting candidates, selecting candidates and the evaluation of procedures. In practice, Wood found that personnel managers took a more subjective, less procedural view of recruitment. However, argues Wood, this was not necessarily being unsystematic and ad hoc on their part. He notes that the textbook models of recruitment neglect the role of personal attributes and subjectivity in assessing the selection process (1988,p.16). Thus, argues Wood:

'It is necessary to distinguish the problem of procedure - the need to be systematic and objective - from the problem of the role of attributes in relation to the needs of jobs - that is, the potential role of subjectivity both in assessing individuals and in the performance of tasks.' (ibid.p.16).

Hence, objective, scientific selection need not mean the disregard of personal attributes; Wood notes that even Taylor tested Schmidt for his work attitudes and attitudes to money (ibid.p.17). The unstructured nature of most interviews, where seven-point plans and standard questions play a non-existent or partial role, and the importance given to the interview, does not imply unprofessionalism and a casual approach. The interview is the most direct site for assessing the subjectivity of the worker, the subjective aspect of his labour power. Experience shows recruiters that informal, flexible approaches are required. Thus, argues Wood (1986), the recruitment process may be based on custom and practice and the dominance of the interview but this does not mean it is unprincipled. It is informal but not casual (Wood:1986,p.116). Windolf (1988c) argues that the interview is the site where applicants transmit a variety of signals which the recruiter takes as indicators of future work performance. Its 'central role' rests on the fact that recruiters look for personality traits and attitudes and not just technical skills or skills deriving from formal education (p.200). The CEES has shown this to be the case for apprentice recruitment.

Thus, the informal approach to recruitment and the stress on assessing worker subjectivity through utilising subjective methods (chat in the interview) and the importance of the interview is a response to the complexity of recruitment on the part of the recruiter and the nature of the entity being assessed. The casual approach to recruitment is more apparent than real (Blackburn and Mann:1979; Wood:1988). For CEES employers, the interview was overwhelmingly the most crucial method used. Less than half of them used any standard questions. Interviews were mainly 'just a chat'. But this does not mean they were approached casually. The crucial point was to assess applicants' work and social attitudes and personality traits. General chat was seen as a good way of doing this. For those firms with standard questions, the importance of hobbies, interests and sports was that they got the applicant talking so that personality and attitudes could be assessed. In effect, there was not a great gulf between those who used standard questions and those who did not; the ends were the same. Those that used standard questions were concerned with specific work attitudes; hence the questions about why applicants wanted to come into engineering and about their attitudes to school metalwork and technical drawing. They were also concerned about the quality of reproduction of labour power within the family; the questions on family background reflected this. The questions on being in schools clubs and how they got on at school were mainly concerned with the sociability of applicants, how well they fitted into groups and participated in activities - key social attitudes were being assessed here.

The interview was highly suited to gauging crucial classes of attributes sought in applicants; work attitudes, personality traits and social attitudes. Given the importance of these in the CEES it was not surprising that the link between these and the interview was so strong, as the interview was perceived as basically being about assessing these attributes. The importance of the interview derived from its role in assessing the most important classes of attributes sought in applicants. Attributes sought in applicants and recruitment methods were in close harmony here and this pointed to a complex and subtle, yet rational and systematic approach to recruitment amongst CEES employers.

Chapter FourteenRECRUITMENT METHODS: TESTS, SCHOOL REPORTS AND CHANGES IN RECRUITMENT METHODS(i) Introduction

In this chapter the roles of the second (tests) and third (school reports) most important recruitment methods are examined. Changes in recruitment methods in the five years prior to interview are also examined. It is argued that tests played a specific role as recruitment methods; as indicators of learned skills (particularly maths and English) and general abilities (particularly practical ability and intelligence). In Section (ii) it is argued that few firms had manual dexterity tests due to the time involved in running them. Section (iii) advances the argument that the non-existence of tests on character and personality did not show that the employers exhibited an inconsistency between attributes sought in applicants and recruitment methods. Rather, it was the case that the tests performed a specific role through indicating the development of key learned skills and general abilities in the absence of exam results and the perceived unreliability of school reports. The relation between different recruitment methods and their specific and general roles in recruitment are important to keep in view before charges of employer irrationality are launched.

It is also argued (Section iii) that there is some evidence, based on the type of tests given, which suggests that they favoured boys over girls. The fact that they included practical elements relating more closely to boys' socialisation patterns in the home and school and particular subjects (such as physics) which girls were less likely to do to exam level, made this likely. However, without examining the tests themselves (as employers were cagey about releasing details due to the fear of losing their licence to run them) it was impossible to determine the extent of gender bias.

School reports (Section iv) were mainly about assessing work attitudes, it is argued. To the possible surprise of teachers, parents and pupils they had

little to do with academic suitability - learned skills or qualifications. They indicated the development of work attitudes most of all, but also social attitudes and personality traits. It was for this reason that the summary at the end of the reports, where the teacher concerned gives general statements about personality and work attitudes, was deemed to be useful. Although 85% used school reports, the depth of use varied. For eleven firms their use was optional; they were sometimes looked at if they were brought, but they were not specifically asked for. The qualitative data showed that other firms used them more or less enthusiastically and in depth depending on a number of factors; the extent to which they were held to be unclear, inaccurate and ambiguous; the extent to which they were deemed to be honest reflections on applicants, and the extent to which they were seen to lack detailed comments on personality and work attitudes. Those not using schools reports placed great emphasis on these arguments, along with the additional one that the crucial final report of the fifth year was sometimes not there anyway as they were recruited before it was completed.

Few firms (30%) had changed their recruitment methods in the five years prior to the interview (Section v). The question is why, given drastic change in youth labour market conditions, more firms had not made changes. It is argued that they were keeping their labour processes in view, rather than the youth labour market, in recruitment - an understandable strategy. Raising qualifications, a plausible response in relation to a situation where more applicants with higher qualifications were available, lacked plausibility once the subjective aspect of labour power is considered. There was no point in upping qualifications such that the relation between the labour process and qualifications was less one of the former regulating the latter. This strategy would lead to more problems of frustrated youth being recalcitrant in relation to work perceived as being beneath them. The subsumption of their will within their labour power would be reduced.

(ii) Manual Dexterity Tests and Practical Ability

Manual dexterity was classed as a physical attribute of the applicant in

Appendix 7. But it was part of the general complex of attributes relating to practical ability, a key attribute sought in recruitment (Chapter Six). Only four large firms had manual dexterity tests. One small firm, Davies-Roche Ltd, had dexterity tests up to 1976-77. Two of the large firms used conventional nuts and bolts tests, (undoing nuts and bolts within a time limit). Another fitted shapes together within a time limit, and Minex had two tests; one involving putting dots in circles and the other tracing lines - both within five minutes.

Practical Ability involved more than manual dexterity for the firms in the CEES. This was why it was classified separately and under general abilities (Appendix 7). It was a broad concept involving dexterity, appreciation of line and shape, mechanical reasoning (putting things together/taking them apart, explaining how things worked and cause and effect) and including a general interest in 'all things mechanical'. Employers mentioning it were mostly looking for people with 'mechanical minds'. As well as straightforward manual dexterity tests, many employers gave tests on things like 'mechanical comprehension' and 'mechanical reasoning', which were also indicators of practical ability. The battery of tests used by the MGTS, (the Birkbeck B1-B5), included a spatial conjunction test. Of the 60 non-MGTS firms, 30 had tests of some description, and 17 of these firms, (57% of all non-MGTS firms with tests and 28% of all non-MGTS firms), had tests which involved mechanical reasoning/spatial conjunction/mechanical diagrams. In addition, three of the MGTS firms gave their own tests (Classic Engineering, D. Clarke (Engineers) and Auto-RAK Machine Tools), and D. Clarke's included a mechanical comprehension test. Counting the MGTS firms, 64 firms (60%), had some form of mechanical reasoning/spatial conjunction test.

Tables 14.1/2 summarise the content of the tests of all firms and those 33 firms who organised their own tests, (that is, the 30 non-MGTS and the three MGTS firms). The data includes the four cases of manual dexterity tests described above and also the tests carried out on craft or technician applicants only. The latter were given a proportion of 1 relative to the proportion of craft/technician apprentices within the firm.

It was not surprising that only 5% of firms whose applicants were tested had manual dexterity tests. The sheer number of applicants in some large firms made them costly to run in terms of staff time. Some of the big firms had nearly a thousand applicants for apprenticeships and the MGTS had 1,365 applicants in the Coventry Division in 1978/79 (MGTS:1979). Tests typically had to be undertaken on a one-to-one basis to allow observation if they were to be of any use. This would involve heavy consumption of staff time. No wonder firms more commonly went for tests involving spatial conjunction that could be carried out en masse. Apart from the time taken to administer manual dexterity tests, firms had many other ways of assessing manual dexterity. The probationary period was useful. Appraisal of items of work brought in from school was also mentioned. Davies-Roche asked those getting to the final stages of recruitment to come in on Saturday mornings for a few weeks before finally taking them on. Thus, there were other indicators of manual dexterity without time-consuming tests. But the most usual reason given for not having manual dexterity tests was lack of time.

(iii) Written and Oral Tests and Analysis of Aggregated Tests

There were 33 firms which conducted their own tests; 30 non-MGTS and three MGTS firms. Thus, applicants to the latter three firms were tested twice, once by MGTS and once by their firms. All but one of these were written tests. Meadowcroft Tools conducted a short oral maths test as part of the interview. In total, applicants were tested in 77 firms, the 30 non-MGTS firms who conducted their own tests and the 47 MGTS firms who had tests organised for them by MGTS. Applicants were tested in 72% of firms.

Table 14.1 gives data on the aggregate of manual dexterity test described in the previous section and all written and oral tests including firms that had tests conducted for them by MGTS. Roberts (1984) has noted that tests of vocational abilities used in youth recruitment are often unrelated to the skills required for the job. The Board of Education (1928) warned employers about the danger of using tests not relating to the work in schools. It was difficult to come to an assessment on either of these points as CEES firms

Table 14.1 : NUMBER AND PROPORTION OF FIRMS HAVING VARIOUS TESTS FOR APPRENTICE RECRUITMENT

TYPE OF TEST	A- 77 Firms who had Tests for Apprenticeships (Inc. MGTS Firms)		B- 33 Firms who conducted their Own Tests	
	No.	% (n=77)	No.	% (n=33)
General Intelligence/ I.Q./Mental Reasoning- Ability	58.4	76	12.4	38
Drawing/Sketching/Isometric Sketching	2	3	2	6
English/Essays/Word Association	13.4	17	13.4	41
Maths/Arithmetic/Numerical Ability	77	100	33	100
Manual Dexterity	4	5	4	12
Mechanical Physics	55	71	8	24
Spatial Conjunction/Mechanical Reasoning - Comprehension - Diagrams - Questions - Understanding	64	83	18	55

Notes: Where firms conducted particular tests for craft or technician applicants only, then the type of test was allocated a proportion of 1 based on the proportion of craft or technician apprentices in the firm.

were careful about giving information on the tests as they feared that they might lose their licence to run them. Wood (1986) has made a more subtle point. He points to the fact that in relation to tests for adult recruitment the focus is on the 3R's, typing and dexterity, not on potential ability or personality (which figured heavily in recruitment criteria). A similar point could be made about tests in the CEES. The CEES employers placed great emphasis on work attitudes and personality traits in recruitment, yet learned skills (especially mathematics and arithmetic) and general abilities received the most prominence in the tests. Prima facie, this may appear inconsistent. Why were there no attitudinal tests or tests designed to elicit information on character?

The above argument has a superficial appeal. Not only were employers' tests often unrelated to jobs (Roberts:1984), but they did not reflect employers'

priorities in their recruitment criteria. Their recruitment methods were inconsistent with attributes sought in applicants. This would be a misleading conclusion. CEES employers saw particular recruitment methods as mainly relating to particular classes of criteria and attributes sought in applicants. Overall, the methods made sense and should not be taken in isolation. Indeed, a few argued that the question on specifying the most important element in recruitment was misleading as it was 'a total process' (Chapter Thirteen).

Tests were perceived as being mainly about gauging learned skills and general abilities; that was their specific job - all the more important as first, exam results were not known, and secondly school reports were seen as being unreliable guides to these attributes. On the other hand, the interview was for assessing attitudes and personality as direct evidence was available; one could observe these through talking with the applicant. This was seen as the best possible evidence; why bother to have personality tests when the person revealed themselves to some extent in the interview? The inconsistency is only apparent. Tests played a specific not a general role.

Table 14.2 examines the total volume of the various types of test. Some firms had two or three tests of the same type, for example, two mathematical tests; one on simple maths and the other on arithmetic. This was not picked up by Table 14.1. Nearly two-fifths of all the tests were in maths/arithmetic/numerical ability, and as we saw in Table 14.1, all firms whose applicants were tested had tests of this type. Only 4% were in English-based skills. Literacy skills were not as important as numeracy skills for CEES employers, as previously argued (Chapter Ten).

Another interesting finding relates to the importance of spatial conjunction and mechanical reasoning tests. Keil and Newton (1980) have argued that employers' tests for school leavers were typically inappropriate for girls. They incorporated male-oriented norms. Table 14.2 suggests that a facility with subjects which girls were less likely to do up to exam level than boys (physics, metalwork, technical drawing) and things mechanical in the home might prove useful for some of these tests, giving boys a relative

Table 14.2 : NUMBER OF VARIOUS TESTS CARRIED OUT FOR APPRENTICESHIP APPLICANTS

TYPES OF TEST	A- Tests in all 77 Firms		B- Tests in 33 Firms who conducted their Own tests	
	No.	%(n=343.2)	No.	%(n=108.2)
General Intelligence/I.Q/Mental Reasoning - Ability	60.4	18	13.4	12
Drawing/Sketching/Isometric Sketching	2	1	2	2
English/Essays/Word Association	14.8	4	14.8	14
Maths/Arithmetic/Numerical Ability	134	39	40	37
Manual Dexterity	4	1	4	4
Mechanical Physics	55	16	8	7
Spatial Conjunction/Mechanical Reasoning - Comprehension - Diagrams Questions - Understanding	73	21	26	24
TOTAL	343.2	100	108.2	100

Notes: Where tests were conducted for craft or technician only a proportion of one was allocated to the appropriate test type based on the proportion of craft/technician apprentices in the firm.

advantage. The mechanical physics, manual dexterity (involving nuts and bolts) and spatial conjunction tests would tend to favour boys as their family socialisation (helping Dad with things mechanical and play routines) and educational careers were more likely to incorporate experiences pertinent to these tests relative to the experiences of girls. The extent of this cannot be ascertained without a detailed study of the tests themselves.

(iv) School Reports

As well as giving employers information on the academic record of applicants, the reports also gave them valuable information on attendance, behaviour and attitude. On these last points, employers noted the usefulness of the summary at the end of most reports which gave some insight into 'what

the lad was like'. However, school reports were not used by all of the employers in the CEES. Furthermore, a number of employers that did use them did so in a desultory half-hearted fashion. Although Table 14.3 shows that 85% of the employers in my CEES used school reports to some extent, this figure hides a deep scepticism about their usefulness amongst a substantial minority. For eleven of the non-MGTS firms, school reports were optional; they did not ask for them but they looked at them if applicants brought them along to the interview. Even then, five of these eleven firms said that they just 'flicked through them', giving them little attention. It should be remembered that all MGTS firms were sent school reports as a matter of course, as part of the overall MGTS 'package'. Yet three MGTS firms did still not bother to look at them. Higher usage of school reports by MGTS firms can be explained by the fact that they had to make no efforts to obtain them. Why then did some employers in my CEES display a cautious, and occasionally a disdainful attitude, towards school reports?

First of all, it was felt by some, even those that used them, that school reports 'were not forthcoming in comments'[Morton James Precision]. Not enough was said about what the lad was like; his character and attitudes. A second criticism was that even where comments were expansive they were often unclear. This was a common complaint; those making it had little time for ambiguity. As Auto-Gears noted:

'Yeah,..with reports, it's a case of actually **translating** what the teacher has put. Like,.. 'He's a **lively** member of the class', which means he's a right tearaway!..[Laughs]...It's all that sort of thing.'[Research Notes, employer's emphasis].

A few employers, such as Transco and V. Broughton (Machine Tools), held that teachers did not want to write off young people in the search for jobs, and to some extent accepted this situation. Others, such as Olmec Machine Tools, saw nothing wrong in having clear value judgements in school reports, arguing that at present they were all platitudes. A few, such as Deltron Radiators, spoke out against teachers making value judgements in school reports on the basis that they were not fair as young people might be changing, and anyhow:

'We don't ask for them..[reports:GR]..We're more concerned with how we can get them to be, rather than how he has been.' [Research Notes, employer's emphases].

Thus, teachers were in a 'no win' situation on value judgements in reports. However, there were more firms that supported the Olmec position as against the Deltron stance.

Table 14.3 : USE OF SCHOOL REPORTS

USE OF SCHOOL REPORTS		YES	NO	OPTIONAL	TOTALS
<u>NON-MGTS Firms: By Size</u> (Number using Reports)					
Group A: up to 50		15	8	11	34
Group B: 51-100		2	0	0	2
Group C: 101-500		6	2	0	8
Group D: 501-1000		4	2	0	6
Group E: 1001+		9	1	0	10
ALL NON-MGTS	No.	36	13	11	60
	%(n=60)	60	22	18	100
MGTS FIRMS	No.	44	3	0	47
	%(n=47)	94	6	0	100
ALL FIRMS	No.	80	16	11	107
	%(n=107)	75	15	10	100

There were other reasons for regarding reports with suspicion, or simply not using them at all. New Midland Sheet Metal argued that they were inaccurate; not just in predicting academic success and ability to cope with college courses, but also in terms of character assessment. To prove the point, New Midland noted the case of one of their current apprentices who got 'A's' for 'Honesty', 'Sociability' and 'Helpfulness' in his report. New Midland found the lad far from 'honest' and 'helpful' and had experienced '...a lot of problems with him...So, so much for that!' [Research Notes, employer's emphasis], was New Midland's conclusion; reports could not be trusted. Craig

Bros., non-users of school reports, thought they were simply irrelevant to the selection of apprentices as school was so different to factory life. Industry and school were two different worlds, with their own rules and norms. Even if they were honest school reports could not predict how a young person would cope in a work environment. Finally, like qualifications, reports often came too late. Quantex Hydraulic Systems argued that they would like to use reports but found that they usually had offered all their apprenticeships before the crucial fifth year report was available - hence their reliance on assessment tests.

We have examined some of the reasons why various firms either did not use reports or used them but stressed their limitations. The following subsections examine how those who did use them actually gained valuable information from them, and what this information was. It is shown how the reports were used to search for potential apprentices and weed out those whose potential seemed inadequate.

Using the Reports to Find the Good Apprentice

The employers were asked what sort of things they noticed in the reports that suggested the applicant would make a good apprentice. In all, 38 different factors were noted by 91 employers who used reports in the CEES, (those using them as standard procedure and the eleven for whom reports were optional). There were 185 references to these 38 factors. Eight firms said that they either did not know what they looked for or that they took little notice of reports so 'couldn't say', and one firm argued that schools were too dishonest about the 'good points of pupils' so they ignored them. In all then, we are talking about 82 firms who gave these 185 references to 38 factors; on average there were 2.3 references. Table 14.4 summarises the findings for those factors referred to by at least five firms.

The most striking thing in Table 14.4 is how little school reports were used to gauge academic suitability. The three top academic factors mentioned, (good at maths, good at metalwork/practical subjects and projected grades), together were only just a little above the level of sports. 'Tries hard' was

not an academic factor; employers were more concerned with the fact that a young person tried hard rather than the results of all the effort. It was more to do with work attitudes. Good marks generally showed that an applicant had tried hard, though not always. Some employers noted that 'high flyers' could gain good marks without stretching themselves. Thus, they preferred comments from teachers such as, 'Tries hard' or 'Consistent effort' as evidence as opposed to high marks.

Table 14.4 : FACTORS IN SCHOOL REPORTS SUGGESTING AN APPLICANT WOULD MAKE A GOOD APPRENTICE - (REFERRED TO BY AT LEAST FIVE FIRMS)

FACTORS suggesting applicant WOULD make a GOOD Apprentice	No. of times factor referred-to	% of firms who mentioned factors, who referred to X (n=82)	As % of all references to the 38 factors (n=185)
Good Attendance	13	16	7
Good at Maths	6	7	3
Good at Metalwork/Practical Subjects	6	7	3
Good Behaviour	6	7	3
Had Posts of Responsibility	9	11	5
Projected grades Good	7	9	4
Punctuality/Good Timekeeping	22	27	12
Parental Support	5	6	3
Sports: in Teams/Interest in	17	21	9
Taken part in school activities	10	12	5
Taken part in school Clubs	10	12	5
Tries hard/Consistent Effort	33	40	18

Using School Reports to Weed Out Unlikely Apprentices

The employers were also asked which factors in the school reports suggested an applicant would **not** make a good apprentice. A total of 35 different factors were mentioned by the 91 employers who used the reports. There were 121 references to these 35 factors - considerably less than the 185 references to the positive factors. Nine firms said they took little notice

of reports so 'couldn't say' or did not know what they looked for. In addition, there were a further ten firms who looked for negative comments but rarely saw them, so felt that they had nothing to say on the question. Given this, there were 72 firms who gave the 121 references to the 35 factors; an average of only 1.6 references. This was probably because schools were less prone to write overtly negative comments about individuals relative to positive comments in relation to suitability for apprenticeship. Almost all the firms not making use of the reports for negative comments were MGTS firms, where applicants with poor reports would be less likely to have been sent to the firms for interview.

The employers were clearer about what factors in the school reports suggested that applicants **would not** make good apprentices. The four most common factors accounted for 58% of all references. The top four factors in Table 14.4 accounted for only 46% of all the references to the positive factors. Again, the most important factors were to do with work attitudes. The four most important factors (bad timekeeping/poor punctuality; lazy/doesn't try; discipline problems/if he's a 'troublemaker'; poor attendance) were all references to work attitudes. Academic factors were even less important as negative factors than they had been as positive ones.

(v) Changes in Recruitment Methods

Surprisingly, despite the steep rise in youth unemployment, the CEES showed little change in recruitment methods in 'the previous five years'. Only 32 (30%) of CEES firms reported any changes. Altogether, these 32 firms reported 46 different changes. There were few changes that were made by a significant proportion of these 32 firms. Top of the list came tests; seven firms had introduced tests in the five years prior to interview. The other most common changes were: joining MGTS (4 firms); the setting up of interviewing panels/committees, where applicants were interviewed by a group of people rather than just one person (4 firms); changing from the NIIP tests to either the Birkbeck B1-B5 or the AH4 test (general intelligence, maths and English), as these tests were seen as being shorter, easier to

mark and clearer (4 firms); and the qualifications being demanded (3 firms).

When the 32 firms were asked why they had made these changes, nearly a half, (15 firms), said that they had instituted the changes either to save time (due to the large number of applicants and/or less staff due to redundancies and rationalizations) or because there were more applicants. There was little evidence of qualification inflation - a general rise of qualifications due to oversupply of potentially qualified recruits. Mercury (Aero Products) said that in the last few years they had demanded that applicants for craft apprenticeships had maths, English, technical drawing and physics as an absolute requirement. Previously, craft applicants had been recruited without one (or occasionally two) of these subjects. Physics and T.D. had been the problem subjects. But now:

'....amongst the applications that we get we can pick out from amongst them the people with the subjects exactly what we want...It all depends on the market. You, uhm,...adjust your criteria to the market.' [Research Notes, employer's emphasis]

Mercury could be more exact on qualifications so that they became determinative in apprentice recruitment in the late 1970s and early 1980s; youth not having the stipulated qualifications were not taken on. Previously, some leeway was given on qualifications, but now tight standards could be set. As Ken Wardle, MGTS Recruitment Officer, explained, the justification of the approach taken by firms such as Mercury was that:

'The employers' problem is not filling apprenticeships, but the cost of long recruitment programmes.' (Frith:1981a,p.24).

The costs involved were in postage, paper, staff time and disruptions. Peter Doores, a Coventry careers officer, noted that the practice of asking for higher qualifications to keep numbers of applicants down was a phenomenon of large organisations in the City (CET:9/3/1979). Craft apprenticeships were singled out by Doores as being particularly affected by this tendency. This was not surprising; the numbers involved for craft applications generally outweighed technician and non-apprenticed youth job applications, as craft jobs were the largest single category in engineering. However, the CEES found that the strategy of putting up qualifications to dampen applications

was not common. More likely, qualifications demanded became firmer and more determinative rather than being increased.

Overall, the volume of changes was not substantial. The crisis in engineering apprenticeships of 1980-81, with the collapse of numbers of apprentices recruited, had surprisingly little immediate impact on recruitment methods. It must be remembered that engineering apprenticeships in Coventry were at an above-average level in the late 1970s, having made a substantial revival from a low point in the early 1970s (Chapter Five). There had also been a revival in the Coventry youth labour market in line with the overall labour market in Coventry in 1978-79. It appears that up to 1980-81, the need to change recruitment methods was not apparent. Cuming (1983) has made a more general point, that:

'In times of high unemployment employers, generally, do **not** change their procedures nor do they change their criteria; they use existing procedures and criteria, only **more stringently**.' (p.34, my emphases).

Hence, on Cuming's (1983) analysis, changes in recruitment methods would have been just as infrequent after 1980-81 as they had been 1975/76-1980/81 in Coventry engineering apprenticeships. This raises a more general question; if labour market changes do not induce substantial changes in recruitment methods, then what is the main drive behind changes in methods?

Windolf and Wood (1988a) found that changes in recruitment methods and criteria do not mainly flow from changing labour market conditions. The main changes occurred when a mistake was made which was avoidable, when a worker was recruited and deemed to be of insufficient quality. At this point recruitment criteria and methods might be overhauled to cut down the likelihood of future mistakes. In this way recruitment criteria and methods evolved organically within the firm. They were not changed strictly in line with labour market conditions. Windolf and Wood (1988a) found that personnel managers were reluctant to lower criteria and change methods when the labour market was tight. Similarly, they did not automatically raise them when they received more applications. This last strategy would make sense in terms of the subjective aspect of labour power, to recruit those whose will is most subsumed within their own labour power and hence are less resistant

to expending labour power. As argued earlier, the labour process regulates recruitment in respect of the subjective aspect of labour power. If it did not, and recruiters took on those with the highest possible qualifications they would be stoking up trouble in terms of frustrated workers who perceived that the effort and time put into the development of their own labour power (from their perspective) was not worthwhile. Employers, in their own way, were aware of this possibility. This shows itself in the fact that Windolf and Wood (1988a) found that recruiters kept the job, the workgroup and the labour process in view first and foremost in recruitment. They concluded that recruitment methods and procedures reflected changes in the labour process and in the product and:

'...therefore we would not expect any great overhaul in recruitment practices in the light of changing levels of unemployment, and certainly no great move towards more intensive selection.'(p.4)

Indeed, if employers had substantially increased qualifications then they would run up against the recalcitrance of workers as their subjective aspect of labour power became less subsumed within their labour power. Wood and Manwaring (1988) make an additional point that employers in the 1980-81 recession were too busy surviving to think much about recruitment; an activity they believed they would be doing much less of in the immediate future. Windolf and Wood (1988a), Wood (1988) and Wood and Manwaring (1988) provide a basis for understanding the relative lack of change in recruitment methods of CEES firms in the five years prior to interview. On this analysis, CEES firms kept their labour processes in view relative to labour market conditions. They kept the jobs likely to be entered by apprentices, and also training and further education arrangements, in view in recruitment over and above any labour market conditions. They also had little time to devote to recruitment in the recession and saw less reason for devoting time to it. This would seem reasonable in the light of the above arguments.

Wood (1988) and Windolf and Wood (1988a) argue that rather than recruitment criteria and methods changing in the recession of the early 1980s, it was recruitment channels - the ways recruiters and applicants are brought together - that underwent most change. Aspects of this argument, and their

implications, will be examined in Part Four.

(vi) Some Analysis and Discussion

Part Two argued that, on the whole, CEES employers kept their labour processes in view when they gave statements of the attributes sought in applicants in recruitment; these attributes were dominated by labour power attributes. The latter were regulated by, and flowed from the labour process as a whole and the specific job in question in particular. On the surface, the criteria of recruitment were largely free of contradictions from the perspective of individual recruiters recruiting for individual capitals. CEES recruiters did not recruit on whims and generally kept their labour processes in view in apprentice recruitment. The inconsistencies and tensions within attributes sought in applicants reflected deeper contradictions, contradictions flowing from the nature of labour power itself, its essential aspects. It was not casual, confused or ignorant recruiters that gave rise to apparent inconsistencies in attributes sought; in conventional language recruiters were not generally confused or ignorant of their needs. Rather the inconsistencies were reflections of the contradictions within labour power itself.

The previous chapter and this one have argued that generally the relation between attributes sought in recruitment and recruitment methods was synchronised; the methods on the whole were suited for the assessment of the stated attributes sought. We saw this most clearly in the relationship between interviews and attitudes (Chapter Thirteen). The test findings seemed to counter the view that the CEES employers' methods were consonant with their criteria. Where were the attitude and personality tests? Yet it would be irrational if all methods were totally geared to work attitudes and personality traits. Although work attitudes was the most important class of attributes sought in applicants there were, after all, other classes, and these needed some assessment. Tests played the specific role of gauging key learned skills and general abilities. It was shown that school reports were about assessing work attitudes firstly, but also social attitudes and

personality traits. They were only marginally to do with learned skills. Thus, the CEES employers' methods were not out of 'synch' with their criteria if the total criteria, and the relation between specific classes of criteria and methods, are viewed as a whole. So far then, the CEES employers strategies in the recruitment process seemed rational insofar as they kept their labour processes in view, and the attributes were relevant to working in these labour processes and in training and practical education for the further development of labour power. They also had their own interests at heart when they assessed the quality of the reproduction of labour power in relation to applicants (Chapter Eleven).

Part Four shows that it is when recruitment channels are related to attributes sought, recruitment criteria and methods that inconsistencies arise. What employers do then seems incongruous at the level of immediate appearances. No contradictions of labour power or any other deeper analysis is required to show that what employers do when all three aspects of the recruitment process are examined is in the first instance irrational, even anarchic. But before we examine these points Chapter Fifteen briefly examines what CEES employers were demanding of schools in relation to improving the quality of engineering applicants. It is the first step in the revelation of a peculiar set of findings thrown up by the rest of the empirical chapters.

Chapter FifteenWHAT CAN SCHOOLS DO ?(i) Introduction

This chapter examines the views of interviewees in the CEES as to how school could 'more adequately prepare young people for apprenticeships' in their firms. This was the last question on the questionnaire and hence those interviewees who had the time were able to talk at considerable length on the subject. The question clearly assumes that schools were not doing enough. Few challenged this assumption. It was designed to clearly put the onus on the employers, to ascertain how they wanted schools in the locality to be restructured in line with their **particular** needs, as opposed to the needs of the local or national engineering industry. After hearing complaints from local engineering employers and their representatives in the CDEEA and MGTS about the quality of applicants for engineering apprenticeships, I was curious about how engineering employers felt local schools might contribute towards remedying these negative aspects of engineering apprenticeship applicants. The question put employers clearly on the spot to come up with positive alternatives for schools rather than merely blaming the schools for perceived inadequacies in engineering apprentice applicants.

What they proposed was problematic in terms of previous findings. In terms of attributes sought in applicants in recruitment they had stressed work attitudes, but they were asking schools to concentrate more on learned skills, especially the 3R's. Explanations of this inconsistency are given in Section (v). They rest on denigrating and limiting the role of schools. The CEES employers ultimately had low expectations of schools and even lower educational horizons.

(ii) Schools: Get Back to Where they Once Belonged?

Overall, interviewees interpreted the question of 'what schools could do'

to prepare young people for apprenticeships in their firms in a very backward-looking manner. In Table App4/17 (Appendix 4), it seems that the CEES employers wanted local schools to return to a 'golden age' of tight discipline and large doses of reading, writing and arithmetic. There was straightforward revivalism for a few; four wanted to 'bring back the old Technical schools', two wanted to return to traditional methods of teaching and one firm wanted to get rid of comprehensive schools and another to reduce the leaving age to 15. All very backward-looking, harping back to a time, rarely specified, when school leavers could read, write and do as they were told. On the other hand only one firm mentioned having more computers in schools. None saw the value of having CNC machines in metalwork workshops. For many CEES firms it seemed that the future for the City's schools ought to be set around idealised aspects of the past.

There also appears to be inconsistency between attributes sought in applicants and what schools are being asked to do to improve the quality of applicants. Employers were looking for work attitudes above all else but were asking schools to concentrate on learned skills - especially the 3R's. From the schools' perspective this might appear to be incongruous. At this point CEES employers seem confused about what they wanted from schools in relation to what they wanted from applicants. Clearly, in Table App4/17, 'more discipline' and 'make pupils work harder/instil Protestant Work Ethic' were to do with improving work attitudes. The notion that 'teachers should get experience in industry/engineering' was basically about teachers finding out what industry and engineering were like so that they could go back into the classroom and present a more favourable picture of engineering than they were assumed to be doing at present; this was ultimately about teachers drumming up interest in engineering based on a 'correct' perception of what it was really like. Few of the other 47 factors listed in Table App4/17 had much to do with improving work attitudes. The inconsistency between what CEES firms looked for in applicants and what they expected of schools is explained in Section (v). As we shall see, this explanation mystifies the relation between school and work. It is an explanation which also denigrates, belittles and trivialises the work of the schools.

Only six interviewees challenged the assumption that young people were not being adequately prepared for apprenticeships in their firms. They either said that they were satisfied with applicants they were receiving, that they got the right young people or that schools were meeting their requirements. Three firms believed that schools could do nothing more than they were already doing. Any improvement in apprenticeship applicants would only arise out of more parental discipline and encouragement to do well at school. Five firms did not know what schools could do and one firm refused to answer this question, [Northside Gear Co.], on the basis that: 'I ain't got the time; it would take me all day.' [Research Notes]. As Table App4/17 shows, CEES employers thought that schools should be doing three things to improve the quality of applicants in particular; there should be more emphasis/time spent on the 3R's, more discipline and teachers should get more experience of industry/engineering. The next three sections examine these responses.

(iii) Back to Basics

In the clamour for a return to the basics, more emphasis on the 3R's and indeed the overall emphasis on learned skills, there was an incredible unanimity as to why all this was important. It was argued that schools had to get the basics right so that the firms could build on them. In effect, it was the schools' job to give entrants to apprenticeship the reading, writing and mathematical (but essentially arithmetical) skills that were required as a foundation for further training. The latter was seen as largely the responsibility of the firm. Meadowcroft Tools put it like this:

'It's very, very plain, straightforward and simple: educate them in the 3R's. Er, if they have a good education - reading, writing and arithmetic - that's all they need to equip themselves (for this sort of life anyway). Just to get the job that's all they need here...after that they'll start learnin' - they're just not bein' taught the 3R's.' [Research Notes, employer's emphases].

Meadowcroft Tools explained the relationship between the basics of the 3R's and further learning and training in fairly crude terms, as did many small group A firms. The more thoughtful explanations of the relationship between

basic education and training came from a few group C firms. Bird Panels argued that:

'Basically, I would want schools to go back to learnin' the basic principles of maths and English. If you get a good basics you can build on it from there, but at the moment you 'ave them comin' 'ere with no knowledge, no good information to build on. They've got a helluva lot o' knowledge on a lot of small things, but they 'aven't got enough knowledge of the basics, what you would call the 3R's...That's what's lackin' today.' [Research Notes: employer's emphasis].

We shall see (Chapter Sixteen) that Bird Panels was one of the firms that subverted the MGTS recruitment criteria and procedures by recruiting from sources other than MGTS and taking on people who did not pass the MGTS tests (did not come up to certain standards in the basics - the 3R's) if they had the 'right attitude to work' and had 'got it in their hands'. The interviewee at Bird Panels said that he ignored the test scores. In effect, he ignored vital evidence that applicants had the basic skills (or not) that he apparently placed so much value on. Total inconsistency. Thus, we have to be sceptical about the sincerity of the Bird Panels interviewee's attachment to the 3R's, but he makes the point very clear; basic skills in reading, writing and maths were a foundation on which training could be built. It was the schools' responsibility to provide this foundation. This was the main message of those firms who gave prominence to a return to basics.

The overall importance of the basics, the 3R's, was partly a result of external factors. As we saw earlier, the campaign run by Roger Gilbert of the CDEEA and backed up by the MGTS - that standards of numeracy and literacy were falling had an impact on the perceptions of CEES employers in terms of creating an impression that standards in the 3R's had in fact fallen. No doubt some - though it is not possible to say how many - were led to the conclusion that schools ought to be doing something about 'falling standards' as reports in the local press argued that standards were falling.

(iv) More Discipline

The CEES firms had a variety of things to say about the importance of more discipline in schools. There was not one dominant theme as with the previous

section. First, it was emphasised that it was important as the basis of all learning, both at school and in later life. This was particularly seen as important in firms where all training was on-the-job. If apprentices could not be bothered to listen or 'played up' supervisors and craftsmen, then the latter would not teach them much. Secondly, a few larger firms emphasised the health and safety aspects of discipline. If young people arrived as apprentices lacking in discipline they were a danger to themselves and others. Horseplay could lead to injury. It was not tolerated.

But the most common explanation of the demands for more discipline was that young people were simply expected to 'do as they were told'. Orbit Engineering called on schools to:

'Instil a little bit more discipline into them. Because it's a big thing when they come into a factory and find out they've gotta do as they're told. They should knock some of the childishness out of them before they come.' [Research Notes].

Those calling for more discipline a la Orbit also tended to argue for the return of corporal punishment. Other solutions were to stop employing young teachers, 'weak' teachers and teachers who could not control classes. All these would increase discipline it was argued, and:

'Discipline is in their [pupils:GR] interests; it's what life outside school is all about.' [Summit Tools & Components:Research Notes, employer's emphasis].

It was for their own good as they would learn more whilst at school, enabling them to get better qualifications and increase their chances of finding work, and also because they would fit into life in engineering firms more easily as well as learning more from their training and college courses - all to their own good and conducive to surviving and doing well in their firms. The employers were arguing on the basis that it was in the interests of youth themselves to develop their own labour power. In general, as argued previously, this was true, although its limitations were also noted.

A few acknowledged that schools, in isolation, were up against it regarding attempts to improve discipline. The media, parents and 'society in general' were often working against young people being self-disciplined it was

argued. As Aeroparts Ltd. explained:

'The discipline should be there, but it's not. I don't blame the schools for it all; I blame the society we live in.' [Research Notes].

Parents were seen as hamstringing the schools' attempts to impose discipline by refusing to let children undergo corporal punishment. The law was also against teachers on this. Thus, some believed that schools ought to impose more discipline but that contemporary conditions made this task difficult.

This explains why so many put faith in the Scouts and other formal organisations in imposing tight discipline. They filled a gap that schools were no longer able to fill. Older interviewees occasionally raised the issue of National Service as a vehicle for instilling the sort of discipline they desired in engineering apprentice applicants.

(v) Teachers' Ignorance of Industry and Engineering

There were two interrelated issues at stake here. First, teachers were woefully ignorant of how industry and engineering firms operated. They were ignorant of industrial processes, work patterns and the general importance of industry and engineering to the British economy. The main reason for such ignorance was the career path that most teachers followed. Carbitool Ltd. argued that the general career path - school, teacher training college, and back to school - precluded industrial experience. It was suggested that teachers should go on a week to two weeks placement in local firms to gain relevant experience of industry/engineering. A few went further. Midland Metal Moulds for example argued that:

'Well I think that every two years the teachers ought to spend about six months inside industry or commerce..(or both)..to find out what is goin' on...because I think they get too far away from it - much too far away from it. I know a school-teacher... (a great friend of ours)...and I think his idea of industry died about thirty years ago. So I think it's the teachers that 'ave gotta change.' [Research Notes, employer's emphasis].

A few, such as D. Clarke (Engineers) and Carbitool Ltd. argued that a year in industry should be a prerequisite for entry to teacher training courses

to break the vicious circle of ignorance. Others took a minimalist view; teachers just needed to come round and see the firm and talk to people. But most seemed to argue for a structured 1-2 week programme for teachers where they did actual work on the shopfloor and in offices. Work experience for school teachers.

The fact that four of the 16 firms said that only careers teachers needed to get this experience of industry or engineering highlights the second point of the argument. This was that the main advantage of teachers gaining all this work experience of industry and commerce was that they could then go back into the classrooms and put across realistic yet positive images of engineering and industry in general. Hopefully, this would persuade more able young people to come into industry and engineering. But to do this teachers had to have the knowledge of what industry and engineering were really like. This was because, according to Mercury (Aero Products):

'I think probably the main thing that would help employers generally is that teachers had a better understanding of what kids would be doing if they came to work for us...' [Research Notes, employer's emphasis].

With such knowledge, teachers were in a more credible position to encourage young people to go into industry. As it stood a lot of teachers were out of touch with what was going on in industry and this communicated itself to pupils, it was argued. Hence, even where teachers were not biased against industry and tried to encourage young people to take careers in it, these efforts lacked credibility in the eyes of pupils if it was discovered that these same teachers knew very little about industry. According to the employers that mentioned this point, pupils had to see that teachers had industrial credibility.

(vi) Analysis: Schools - Their Limitations and Role

The main issue raised by this chapter is the inconsistency between what CEES employers mainly looked for in applicants (work attitudes) and what they believed schools could do to improve the quality of applicants for engineering (concentrate on learned skills -especially the 3R's). The

explanation for this inconsistency is two-fold. Without employers making these arguments explicit schools would receive a contradictory account of what was required of them by local employers. However, in making the arguments explicit the employers would expose their narrow horizons and antagonism towards a broad general education it is argued. Let us examine these arguments.

The first centres on the fact that CEES employers believed that schools were very limited in what they could do on work attitudes. As Section (iii) showed, it was argued that schools were hamstrung on imposing tight discipline and producing disciplined youth. Parents and the educational establishment were against corporal punishment, and other sanctions for imposing discipline were inadequate. Simply, the ability of schools to impose the discipline and hence to develop work attitudes through the imposition of this discipline was very limited according to CEES employers. Little could be expected of schools in terms of imposing tighter discipline or developing the Protestant Work Ethic to a greater extent. On raising the quality of applicants work attitudes, CEES employers had low expectations of schools. This was why schools were not asked to do much on work attitudes.

On the other hand there was an emphasis on pupils joining organisations where discipline was perceived as being tight or having part-time work. This was because many in the CEES took the view that discipline in general was most effectively instilled either by membership of organisations such as the Scouts, Air Training Corps (ATC) or Boys Brigade or that work discipline and work attitudes in general could best be cultivated by doing part-time jobs whilst at school. In general, the CEES employers had low expectations concerning the extent to which schools could improve work attitudes. On the other hand, there was a remarkable emphasis on improving the **learned skills** of school pupils. In Table App4/17 factors 1,6,7,9,11,15,19,26,35,41,44 were all more or less to do with enhancing various learned skills. The emphasis on learned skills relates to the role that CEES employers believed schools should essentially perform in the social production of labour power.

This is where the second argument comes in. Some firms argued that aspects

of engineering training should be done in the schools, whilst others argued that such a move would be disastrous. The former tended to be small group A-B firms and the latter group C-E firms. The arguments for starting training in the schools were varied. Those arguing for it it also disagreed about the extent to which it ought to be done. Seven firms argued that there should be specialisation in the curriculum in the last two to three years of compulsory education. Thus, if someone wanted to go into engineering then they should do more engineering-oriented subjects. This would ensure that young people arrived at their firms with a good grounding in engineering both practically, (so that they would be more use on the shopfloor) and theoretically, (so that they would be better able to cope with technical college work). Only one firm went so far as to argue that first year off-the-job training ought to be done in schools. Two grounds were put forward for this extreme viewpoint: first, cost, and secondly that as the length of apprenticeship had declined since the Second World War this would be one way of increasing it again without adding training costs to individual firms. The rest were less ambitious for schools' interventions in training. Five firms argued that school metalwork should be improved. Specifically, they argued for 'qualified' teachers, (qualified in terms of being able to operate milling machines for example), more machines in workshops and more realistic exercises - not just making ashtrays. Hopefully, given these improvements, those entering engineering apprenticeships would have some grounding in the practical aspects of engineering and this would help progress in training. One firm wanted technical college work to be done in the schools in the 4th and 5th years. This would reduce the need for day release - perhaps even end it altogether. The firm in question resented sending a lad to technical college for one day a week. It meant lost working time, and fees were high. Another firm wanted schools to set up small machine shops to do real work, for profit, and to be run by unemployed craftsmen and pupils who would produce articles for sale. This would be a real insight into what engineering was about. Finally, two firms argued that maths in schools could be more tied to engineering so that young people would know the basics of engineering mathematics before they started with

their firms. This would end the need for firms doing remedial work in maths. In these various ways then, these (mainly) small firms wished aspects of engineering training, usually carried out on off-the-job training or on day release, to be attempted in schools. Some saw problems with this approach, the main one being that schools had other industries and areas of commerce to cater for; they could not just cater for the needs of the engineering industry. But ways of getting round this were enunciated. For example, once young people had made their career choice they could then specialise (in whatever area), so not everyone would receive training in engineering, it was argued. Another alternative was that some schools could specialise in engineering whilst others specialised in training for other industries and commerce in the final years.

On the other hand there were those that believed letting the schools get a slice of the action on training would be disastrous. First, it was pointed out that many metalwork teachers were not up to it; some did not have a certificate to use a milling machine as they had not done enough supervised hours to get one. Metalwork departments were poorly resourced - considerable investment in machinery would be required. There was just a general low opinion of school metalwork in these firms:

'...we find that those that have done metalwork at school have to be untrained before we can start again...The educational environment is very different to the industrial environment..[and]..in a lot of cases the 'green' ones are the best ones.'[Conquest International:Research Notes, employer's emphasis].

Young people learnt bad habits in metalwork classes. It was felt that training was so important it had to be left to the experts in the engineering training schools and the technical colleges.

Another objection to more engineering training in schools was that schools had not got the basics right - reading, writing and arithmetic. Until they showed signs of having done this it did not make sense to give them additional responsibilities. Finally, it was a question of split responsibility; the schools were basically responsible for education, but training was the responsibility of industry. Each should stick to what was

its main responsibility. As Mercury (Aero Products) saw it:

'Education I think of as being 'general' and training as being 'specific' to what they're [apprentices:GR] gonna do...Schools should provide the general training; specific training should be done outside school..[on the basis that].. The school environment is totally different from the er..'world of work', if you like, (to use a cliché).' [Research Notes].

Hence, such firms as Mercury saw education as providing general skills, and earlier in the interview the interviewee defined these as the 3R's. These general skills provide a solid foundation on which specific training (in particular areas of commerce and industry) could be undertaken. Whether education and training should be integrated, how much of each should be done by either schools or industry and whether there should be institutional separation between 'education' and 'training' are debates that employers have taken sides on at least as far back as the turn of the century. The source of these perennial dilemmas, which were really different employer responses to the contradictions within the social production of labour power, cannot be discussed here.

What the large CEES firms were arguing was that there was a clear distinction of responsibility within the social production of labour power. Schools were viewed first and foremost as being about providing general education. The more practical this general education was, from the point of view of the individual firm first of all but the engineering sector secondly, the better. As witnessed earlier (Chapter Ten), the CDEEA had successfully mounted a campaign which had the result of making general education, especially numeracy and literacy, more practical from the perspective of the local engineering sector of capital. The large firms supported this move. The role of schools, from the point of view of large local engineering firms was to concentrate on general education, and to provide a foundation for practical education which could be given greater emphasis in schools (especially in maths), but not to encroach on training, which was the responsibility of employers. Schools then, were generally about general education, particularly about making it as practical as possible and especially about making literacy and numeracy as oriented

towards engineering as possible. Calls for schools to concentrate more on the 3R's reflected the concerns of this perspective. The model of education inherent in this view seems impoverished, narrow and overacademic. Schools were being asked to provide large doses of the 3R's. But the 3R's themselves were to be made as practical and as engineering-oriented as was feasible, and the CDEEA had taken steps to ensure this. As Table App4/17 shows, a few argued that schools must be changed not just in terms of these positive demands but their negative corollaries must be taken into account; to get rid of peripheral subjects such as social studies and religious education.

The small firms arguing for more 3R's agreed with the above account but differed in one respect; schools should go still further and provide real training. Costs involved in the social production of labour power should be off-loaded onto schools to a greater extent. But they agreed that the 3R's should be mastered first. The call for greater concentration on the 3R's from the smaller firms reflected the fact that they realised that if their dreams of more training in schools were to become fact then schools had to become more productive in general and practical education, which were the foundations of training. Both the views of the large and small firms coincided on the role of schools to provide general and practical education up to the point where training could commence. They differed on where training should start.

There is a contradiction between the explanations outlined above. The first argues that schools were not up to the task of raising the quality of work attitudes as school discipline was irreversibly defective. On the other hand, it was held that raising the quality of applicants' learned skills - especially the 3R's - was what schools were basically about. However, this demand conflicted with the assertion that schools could not do much about school discipline (even though they ought to) which was seen as the basis of learning or work attitudes. Thus, once the demands of employers regarding schools are set against what they believed schools could do, the former seem unrealistic and the two aspects come into contradiction as schools could not do what employers wanted them to on the employers' own model of schools and their capacities. Ultimately, what schools were being asked to do was

confusing and contradictory. This was a result of on the one hand, employers view of schools as being inefficient, incapable of doing much about discipline and work attitudes, and on the other hand, their view of schools as having the limited and narrow role of raising the quality of numeracy and literacy. The former made the latter impossible. The model of education entailed in the CEES employers' views of the link between school and work was narrow, overacademic and highly instrumental. It both simultaneously denigrated the work of the schools yet called for higher standards within a narrow range of skills (just how narrow was shown by the literacy findings - Chapter Ten). But these inconsistencies are slight compared to those shown in Part Four.

P A R T F O U R

**[RELATION BETWEEN ATTRIBUTES SOUGHT IN APPLICANTS IN RECRUITMENT,
OTHER RECRUITMENT CRITERIA, RECRUITMENT METHODS
AND RECRUITMENT CHANNELS]**

**Control of Recruitment; Relation between Attributes Sought in Applicants,
Other Recruitment Criteria and Methods and Channels of Recruitment;
Discrimination in Recruitment; Collective Aspect of Labour Power; Anarchic
nature of the Recruitment Process.**

*** * * * ***

Chapter SixteenISSUES SURROUNDING THE CONTROL OF RECRUITMENT: TAKING ON TEST FAILURES AND SUBVERTING MGTS PROCEDURES(i) Introduction

The problematic of this chapter derives from findings in Chapter Nine where it was found that just over a half of 73 MGTS apprentices did not have either the qualifications demanded by their firms or the MGTS. It was also found that 13 apprentices had failed both their firms' and the MGTS's criteria - a third of all failures. Yet as we saw in Chapter Six, work attitudes were more important than qualifications. Hence, at first sight there does not appear to be anything problematic about the findings. Was it not just the case that qualifications were not determinative and that failure to secure the 'right' qualifications did therefore not entail being rejected, especially if the applicant's work attitudes were impressive?

Indeed, it could be argued that on the analysis of Chapters Six and Nine those findings were to be expected rather than being problematic. The fact that relatively large numbers of MGTS apprentices were taken on with inadequate qualifications, by itself, did not justify a detailed enquiry. This fact could easily be accommodated within the analysis of Chapter Six, where the central importance of work attitudes was established. But when this fact is set against other pertinent findings it appears that the MGTS employers were **subverting** their formal recruitment procedures and criteria. The interesting questions concern **why** they were doing this. Why were MGTS firms paying a fee to the MGTS to handle the bulk of the recruitment procedure and then undermining and subverting that procedure? The answer to this question, as we shall see, brings in wider issues of competition between firms, control over the recruitment process and firms' policies on recruitment of youth labour. But first, let us examine the detailed evidence that the MGTS recruitment procedure was being systematically subverted before we go on to explanations.

(ii) Test Scores

Our examination of the systematic subversion of the MGTS recruitment procedures by MGTS firms starts with a consideration of the actual test scores of MGTS apprentices. Most of the CEES firms were reluctant to talk about the selection tests. Altex Engineering and Orion Products were exceptions. The former gave me a few examples of the NIIP test papers. The latter provided a detailed breakdown of what the Birkbeck B1-B5 test scores meant. This information from Orion was invaluable; it enabled analysis of test scores of apprentices at MGTS. According to Orion Products the results were to be interpreted in the following way:

100 = the minimum score for a craft apprentice

115 = the minimum score for a technician apprentice

145-150 = candidates capable of following a degree course

Using this information an analysis of the test scores of 101 MGTS apprentices on first year off-the-job training in 1980/81 was possible. This included 10 EITB apprentices but excluded the eight Minex technicians as they did not take the MGTS test.

The results showed that of the 86 craft apprentices 44 (51%) had passed the test by getting 100 or more. Three had no test scores entered; one of these had not taken the test. The two others had not even been interviewed by the MGTS; they had come straight from their firms, circumnavigating the MGTS procedure. This meant that 39 (45%) had failed the tests by getting less than 100. Of these failures, 6 were EITB boys and 33 were apprentices recruited by MGTS firms. Table 16.1 illustrates the patterns of test failure for craft apprentices. It shows by how much they had failed.

Some of the failures were spectacular. It is hard to see why MGTS firms had taken on nine apprentices with very poor scores below 80 when there were nine EITB boys with scores of 90+. One EITB apprentice had a score of 125. Were those three apprentices who scored less than 60 so much better in work attitudes than the EITB boys who had scored double their test scores? Why was an applicant with a test score of only 38 taken on?

Again, it might seem that these questions could be accommodated within the

Table 16.1 : PATTERNS OF TEST FAILURE: AMONGST 39 MGTS CRAFT APPRENTICES WHO HAD FAILED THEIR SELECTION TESTS

<u>TEST SCORES></u>	99-90 No.	89-80 No.	79-70 No.	69-60 No.	59-50 No.	49-40 No.	39-30 No.	T No.
(A) EITB First Year Apprentices (n=6)	5	0	1	0	0	0	0	6
(B) MGTS firms' Craft Apprentices (n=33)	14	11	0	5	1	1	1	33
(C) ALL CRAFT Apprentices who failed Tests (n=39)	19	11	1	5	1	1	1	39

Note: 'Craft Failure' in the Tests = a score of less than 100.

analysis given in Chapter Thirteen. There it was found that the interview was more important than the test scores in assessing an applicant for engineering apprenticeships. Thus, it could be argued that the above results merely reflected this and the fact that work attitudes for craft were paramount. If candidates did well in their interviews then they might be taken on even though they had failed the tests. But there is a problem with this conclusion. With MGTS firms this situation, in theory, could **not occur**. In the MGTS recruitment procedure only those who passed the tests set by the MGTS went onto the next stage, (the MGTS interview). Only if they passed the MGTS interview should they get to the MGTS firms.

If apprentices were being sent to firms by the MGTS with inadequate test scores two things might have happened; either the MGTS could not get enough candidates of sufficient calibre to pass the tests or they were deliberately watering-down their own recruitment procedures. The latter seems implausible and makes no sense. The MGTS were in the business of 'selling' prospective apprentices to member firms. There was no reason why they should deliberately send sub-standard (by their own criteria) candidates to member firms. In the long-term member firms might well look elsewhere for apprentices. Hence, the possibility that the MGTS sent test failures to member firms due to the fact that insufficient numbers of candidates who had passed the tests were available also needs to be examined. It seems a more

plausible explanation.

I had access to MGTS recruitment figures for 1977/78 and 1978/79. The latter showed that 835 applicants were tested. Of these, the MGTS interviewed 594 and 409 were sent to the companies to fill apprenticeships. In theory, according to the MGTS recruitment procedure, the 594 that were interviewed should have passed the selection tests. If the same proportion (34 out of 89, 38%) apprentices taken on in 1978/79 by MGTS firms had failed the tests as in 1980/81 then 58 of the 152 had failed. Furthermore, if member firms were being forced to take on test failures then 315 of the 409 who were sent to the firms must have failed the tests. Only 94 would have passed the tests on these calculations.

But the majority of MGTS firms in the CEES did not receive test scores. Only 18 out of the 47 MGTS firms in the CEES saw them. Thus, it would be possible for MGTS recruiters to send test passers to those that saw test scores and test failures to those firms not seeing them. Firms would not be forced to take on test failures at all. Those that did not receive test scores would not know they were being 'palmed off' with test failures, and those that saw test scores could be kept happy with a supply of test passers.

These speculative calculations suggest that the vast majority of applicants sent to interview at member firms were test failures and the MGTS were practising deception on a massive scale to hide this fact. Certainly, in my interviews with the MGTS firms they did not complain that they were being forced to accept test failures. Thus, either the improbable events above, or something like them, were taking place, or the majority of those sent for interview had in fact passed the tests. No evidence of the former was found and in my interviews at the MGTS I was given the impression that only those who passed the tests would be sent for interview. Furthermore, those MGTS firms who said they would not accept test failures also usually added they had in fact not received any from the MGTS.

One complicating factor was that those who had passed the MGTS tests were often those that had applied to some of the larger firms, according to Ken Wardle, the MGTS Recruitment Officer. Some of these would later withdraw as

they got job offers with the larger firms. This might put a squeeze on numbers available to be sent to member firms. There were 165 withdrawals (young people writing in saying that they no longer wished to be considered, usually because they had received an offer of an apprenticeship elsewhere) in 1978/79. Assuming that all these withdrawals came at the point of sending applicants to the various firms (but the 165 pertains to withdrawals throughout the recruitment process), there would still be 244 applicants to fill 152 places. However, perhaps this factor did cause some squeeze on the numbers of the 'better' apprentices being sent to member firms as those with high test scores, good school reports, high projected grades and so on were snapped up by the larger firms. There was anecdotal evidence for this. The larger MGTS firms were convinced that the best MGTS applicants eventually went off to the large engineering firms in the City.

Evidence from Chapter Twelve suggests that the scenarios of MGTS either practising massive deception or struggling to find enough applicants who could pass their tests were unlikely. First, we saw that when the CCS ran their apprenticeship campaigns they easily obtained more than enough young people capable of passing MGTS tests. Secondly, we saw, in our examination of the qualifications of unemployed school leavers, that there was an ample supply of school leavers with the appropriate level of qualifications; few of them wanted to do engineering, that was the point. However, in the harsh youth labour market conditions of 1980/81, no doubt some who ideally wanted other work would take engineering rather than nothing. The mystifying thing was why so many tests failures had been taken on given the choice that employers had in 1980/81; they had 'never had it so good' since the Second World War in terms of the quantity of applicants available in relation to the available jobs. If, taking the reasonable alternative, the majority of applicants sent by the MGTS to member firms had passed the selection tests then why were so many test failures taken on? Where were they all coming from? The next two sections address these questions.

Before we move onto these questions it should be noted that only one out of the 15 MGTS technicians had failed to reach the minimum test score for technician. Some difficulties might have been expected with technicians. But

no, there was only one MGTS test failure recruited. The phenomenon of taking on test failures was largely confined to craft apprentices. Standards for technician applicants were more regulated according to the demands of the colleges and further education courses as compared with craft. This kept entry standards more in line with stated qualifications, numeracy and other learned skills and general abilities criteria as compared with craft.

(iii) Taking on Test Failures

The 47 MGTS firms were also asked if they ever took on anyone who had not come up to the required standard in the test. Not many were expected to admit to this, for as Wroxborough Jig & Gauge put it:

'I mean, at the moment the world is full of young lads. If somebody doesn't come up to standards then we'll find somebody who would.' [Research Notes].

Yet a surprising 15 firms, nearly a third, said that they took on young people who had failed the tests. When asked why they did this the answers were very revealing. Table 16.2 illustrates the reasons.

Four firms, (Bird Panels, Redland Sheet Metal, Greengate Cycle Products and Atlantic Jig & Tool Co.), argued that they would take on applicants if they showed they had the right attitude to work or could demonstrate that they would work hard. Bird Panels explained why the right attitude to work was paramount:

G 'So, sometimes you will take on somebody who's not passed the test, if their attitude is 'right' in your view?

E I do actually do that, yeah. Midland Group send me more than I require, then I see one or two on my own, an' if I think they'll make it I'll send them down to Midland Group and say to them: 'put them in for the test and interview and see what you think.' If I'm sure then I don't go by what they think; if I'm sure I back mi own judgement...I put more credence now on my own feelin's, and it's not formal...I've 'ad so many disappointments with the sort of lad who gets good exams, passes tech with flyin' colours an' think they're marvellous - they're not. They're not marvellous. When it comes to stayin' power they're not there...I generally go for attitude.' [Research Notes, employer's emphases].

The arguments used by Bird Panels were echoed by the other three employers

who took this line. Bird Panels ignored the judgement of the MGTS if it was believed one of the applicants they had found themselves (not through the MGTS), had the right attitude to work. Thus, not only could the MGTS tests be ignored at Bird but the whole MGTS recruitment procedure was being subverted by Bird taking on its own applicants. Bird Panels was quoted in Chapter Fifteen on the poor numeracy and literacy standards of applicants yet ignored test results showing applicants to be inadequate in these learned skills. If this sort of thing happened on a large scale then the low test scores of a significant number of apprentices would be explained.

Four firms either ignored the test completely (Bird Panels again, Hills Gears), or found the results to be unreliable due to those taking them being nervous, getting/being ill; (Topmark Tools, Atlantic Jig & Gauge again). The Hills Gears interviewee explained that when he was 14 years old he had 'difficulty in finding a decimal point' but went straight into the toolroom at his first firm and 'didn't do too badly'. Now he ran his own firm. Therefore he argued, '...I'm not interested in paperwork for craft people.' [Research Notes]. The implication was that one could rise from the shopfloor to owning one's own firm even with initially poor maths. Test results on maths could therefore be safely ignored.

Two firms, (A.H. Harper and New Midland Sheet Metal), pointed out that test scores might be ignored if applicants were sons of employees. At A.H Harper it would depend also on whether the employee-parents actively campaigned for their own sons. Canvassers might be successful if they:

'...put pressure on us,..if their son could work here. But it would rarely happen.' [Research Notes].

Those 'putting pressure on' were any members of the firm who argued strongly for their son's case. They were not specifically union members or shop stewards (as A.H. Harper was a non-union shop) or other managers. Other workers had to 'sell' their sons to the interviewee. At New Midland there was a strong tradition of taking on employees' sons.

Three firms argued that if applicants 'were good with their hands' then test scores did not matter. Talcott Metals, Topmark Tools and Associated Panels

Table 16.2 : REASONS FOR TAKING ON APPLICANTS WHO HAD NOT PASSED THE MGTS TESTS - (15 MGTS FIRMS)

<u>REASONS</u>	<u>No. of firms giving a particular reason</u>	<u>% (n=15)</u>
1. Applicant 'Got Right Attitudes'/Evidence that they would work hard	4	27
2. Does not take any notice of tests	2	13
3. Tests unreliable ^a	2	13
4. They were sons of employees	3	20
5. Good with/Got it in their hands	3	20
6. Near failures ^b	2	13
7. If employer thought applicant good in all other respects	2	13
8. Applicant had the 'Right Personality'	1	7

Notes: a. Because candidates got nervous, or had been or were ill, or had been subjected to poor teaching
b. i.e. had only failed by a few points.

advanced this argument. Associated Panels however, only ignored the test results for craft applicants, not technicians.

'Near Failures' were taken on by Old Mill Sheet Metal Co. Ltd. and S.D. Machine Tools. The interviewee at Old Mill had argued that whether they took on anyone who had failed the tests depended on by how much they had failed. He also admitted that two of the four apprentices taken on in 1980 had poor test results. Checking in the Apprentice Records it was found that the test scores of the four Old Mill apprentices were: 124, 123, 60 and 38. Thus, Old Mill had taken on two craft apprentices with technician-type scores who were training to be sheet metalworkers and two others, also training as sheet metalworkers, with appalling scores - 38 was the worst result of the 101 apprentices surveyed. Certainly, Old Mill had a very liberal definition of 'near failure'. Interestingly, the interviewee at Old Mill had told me that one of the four apprentices had been reported to Old Mill as not likely to make the grade. However, Old Mill had had all the lads back at the firm for a week and had given them jobs to do. The interviewee explained that, unlike

at MGTS, the lads were asked to make things and then told to go off and do the jobs on their own. At the MGTS they did things 'step by step under close supervision'. In the circumstances at Old Mill, the lad that the MGTS had 'written-off' did the best. Thus, this was a further case of the judgement of the MGTS being undermined.

Two employers believed that if a lad 'was good in all other respects' (good report/right attitudes..etc) then poor test results could be overlooked. Ace Patternmakers and Supertool & Gauge Co. took this line. If, overall, it looked as though they would make the grade a poor test result would be treated as an anomaly. Auto-RAK Machine Tools argued something similar but noted that having the 'right personality' was of paramount importance. Having the right personality was defined in terms of whether the lad would 'fit in' with the existing workforce.

So far we have seen how the MGTS recruitment procedure was systematically undermined by some firms who used MGTS for recruitment. Test results were ignored altogether by some firms. Others ignored them where it was convenient to do so or in cases where they perceived their judgement on particular individuals was superior to that of MGTS. Yet others believed that certain factors, (attitude to work, personality) were more important than test results. All this, by itself, would not be enough to account for much of the phenomenon of test failures being taken on if all apprentices were recruited through MGTS channels. Firms would receive applicants with reasonable test scores, and near failures would in fact be near as opposed to 'distant', as in the case of the two Old Mill apprentices with rotten scores. Bird Panels pointed to a deeper subversion of the MGTS recruitment procedure; taking on applicants direct or from sources other than the MGTS.

A further factor was that far more firms appeared to be taking on apprentices who had failed the MGTS tests than had admitted to it. As we saw earlier, there were 15 firms who said that they took on applicants who had failed MGTS tests. However, through cross-checking the test scores from the Apprentice Records with the data pertaining to Table 16.2, it was discovered that a further 11 firms had in fact taken on apprentices who had failed the

MGTS tests. Under-recording of this phenomenon seems likely here; some were not willing to admit that they were not playing strictly according to the rules. In all, 26 firms had either admitted that they took on test failures or had in fact been discovered to have done so - 55% of the 47 MGTS firms. But were these apprentices who had failed the tests primarily coming from the firms subverting the MGTS recruitment procedure or from the MGTS procedure itself? The next section examines this question.

(iv) Recruitment from Sources Other Than MGTS

The MGTS firms were asked if they recruited apprentices through sources other than the MGTS. It was found that 15 out of 47 MGTS firms, (32%) recruited apprentices through other channels. Thus, getting on for a third of the MGTS firms admitted to radically subverting the formal MGTS recruitment system. Those firms that recruited apprentices from sources other than MGTS were asked what these sources were. Table 16.3 summarises the findings.

The most common source of 'alternative' recruitment was to take on the relatives of existing employees - 6 out of the 15 firms that used alternative sources of recruitment pursued this strategy. On closer questioning as to why they did this there often appeared to be an element of 'keeping the workers happy'; it seemed to act as a form of labour discipline, a carrot to hand out to key workers within the firm. For invariably, when the interviewees talked about the sons of employees being taken on, they almost always talked in terms of the relatives of skilled workers being given preference. These relatives were usually sons, but might be younger brothers or nephews.

When the employers talked about taking the friends of workers on, the discussion was again framed in terms of taking the friends of skilled workers on. But for a few firms the friends/relatives of influential trade unionists had to be taken on for the sake of 'good industrial relations' and were given extraordinary treatment. For example, in the Apprentices' Records it was recorded that apprentice No.77, (who had the lowest score of all the

apprentices for the MGTS tests), had the following written on his form by way of explanation:

'...[No.77] .. came to MGTS from c/o Grandfather. Well in with Andy Smart. S.M.W. Union'[Research Notes,Apprentice Records].

Thus, it appears that No.77 had probably gained entry to his firm, (Old Mill Sheet Metal), on the basis that his grandfather was friendly with someone in the National Union of Sheet Metalworkers.

Preferential treatment was more commonly given to relations/friends of key skilled workers rather than union members who had influence in or on the firm. Firms often went to great lengths to justify this practice. The most common explanation was that the qualifications, tests and MGTS assessment were irrelevant if young people recruited through being friends/relatives of employees had the right attitude to work. New Midland Sheet Metal took this view in attempting to explain why they had taken on No.26 in the Apprentices' Study who had obtained a test score of only 63:

'I suppose I can tell you this at this stage. This particular lad, that we took on last July, August, er...he was the relative of one of our skilled men, an' 'e asked us to give 'im a job. An' I contacted Midland Group and they checked their files and he had been down there for an interview, but he'd been slung out as below standard on the test requirements. I contacted them, and I got his file, and he was quite low academically. Maths not very good. But because it was a lad that belonged to one of our skilled men we though we'd like to give 'im a chance.' [Research Notes].

New Midland explained that this lad was doing better than another one taken on through the normal MGTS channels. But the important point was that:

'We've always maintained with Midland Group that it doesn't hold good that because a lad can't put it down on paper that he's no good to us. We've proved it a number of times; this is just one instance.'[Research Notes,employer's emphasis].

Tests, all this academic stuff, appeared not to be essential for a lad to turn out to be a good apprentice. The fact that an applicant was the son of a skilled took precedence over test scores at New Midland.

For the employers that took on relations/friends of employees, the New Midland example above was typical in terms of the justifications elaborated

Table 16.2 : SOURCES OF RECRUITMENT OTHER THAN MGTS USED BY 15 MGTS FIRMS

Alternative source of recruitment used (See Key) >	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
FIRM								
Diamond (Patterns)	*							
Fairfax Engineering	*							
Bird Panels		*						
Parkinson Bros.			*					
New Midland S/M			*					
Summit Tools				*	*			
Rollogears			*			*	*	
Atlantic Jig.			*					
Aeroparts			*					
H. Smith (Tools)			*				*	
D. Clarke (Engs)	*							
Supertool & Gauge					*			*
Court (Manufacturing)	*				*			
Hills Gears							*	
S.D. Machine Tools	*							
TOTAL	5	1	6	1	3	1	3	1

KEY

(1) Direct Applications: where young people wrote in to the firm in the first instance and were recruited by the firm rather than enter the firm indirectly through the MGTS system.

(2) From local schools: where the employer had close contact with the Head or Careers or other teachers and asked for recommended lads to be sent for interview.

(3) Internally (relatives): usually sons of existing employees being given preference.

(4) Internally (already working there): young people who were already working at the firm in un/semi-skilled jobs or on the YOP.

(5) Advertised in the 'Coventry Evening Telegraph': the most active and public form of subverting MGTS procedures.

(6) Friends of workers: recruiting from existing employees' friends.

(7) Customers'/clients' sons.

(8) Careers Service: recruiting by asking Careers to send down young people for interview; not just notifying the vacancy.

as to why the practice was pursued. Key themes were: that young people taken on in this way often turned out well; that the MGTS imposed academic

standards that were higher than necessary; that the particular trade did not require people with good academic qualifications but did require people who were 'good with their hands'; that they had good work attitudes.

These themes were also present in justifications in relation to taking on apprentices from other sources in Table 16.2. For example, Bird Panels, who took on lads from local schools independently of the MGTS recruitment procedure, noted that one lad taken on this way won a prestigious local engineering prize for apprentices - the Blundell Award. Basically, argued Bird Panels, to do well at their firm it was mainly a case of whether lads were willing to work hard. With the contacts the interviewee had built up with teachers in local schools, and through a system where young people recommended from these schools would come in to the firm in the holidays and Saturday mornings, it could be ascertained whether these young people had the right attitude to work. With the Midland Group lads, argued the Bird Panels interviewee, you were always taking a risk as to whether lads had the right attitude to work.

Even at New Midland Sheet Metal, (who seemed very biased in favour of taking on friends/relations of skilled employees), attitude to work had to be guaranteed as far as possible. This guarantee was given by the lad himself and the person 'sponsoring' him; the former promised to work hard and the latter took on some of the responsibility for seeing that he did so. Hence, lads took on in this way were under additional pressure to do well. An uncle getting his nephew into New Midland would take measures to see that the nephew did well (encouragement, surveillance, emotional support), otherwise such favours would not be granted again, argued the interviewee. The lad would not want to let his uncle down. Nevertheless, it appeared that New Midland needed proof that the arrangement would work; six monthly progress reports provided an additional control on performance.

Direct Applications

The second most common alternative source of recruitment was 'Direct Applications'. Here, applicants wrote in to the firm in the first instance -

and the application proceeded from there. However, the five firms using this source handled the situation differently. Fairfax Engineering and D. Clarke took on direct applications without any reference to the MGTS procedure. Diamond (Patternmakers) forwarded direct applicants to the MGTS so that if a lad was not taken on by Diamond he had a chance elsewhere. S.D. Machine Tools also forwarded direct applications to the MGTS but gave preference to direct applicants. In both these cases the MGTS were clearly involved, but Diamond sorted out the best direct applicants before sending on all their direct applications to the MGTS, whereas S.D.'s preference for direct applicants asserted itself before they had gone through the MGTS procedure. It could be argued that S.D. were only bending the rules rather than radically subverting MGTS procedures. Finally, Court (Manufacturing) selected out direct applications from the application forms and sent applicants down to the MGTS to be tested. Those who did well in the tests were interviewed and the most suitable recruited. At Court (Manufacturing) control over recruitment moved decisively towards the firm. The MGTS played a reduced role.

These five firms took on direct applicants largely because they wanted people committed to their particular firms, or (in the case of Court but also for D. Clarke) the interviewees made it clear that they wanted a larger measure of control over the recruitment process than was typical under the MGTS scheme. They felt such control was necessary to get the sort of young people they wanted. It put them in a better competitive position to raise the quality of young people taken on.

Make it Public

The element of control was even more to the fore in the third most important alternative source of recruitment: advertisements in the 'Coventry Evening Telegraph'. In effect, the three firms, (Summit Tools, Supertool and Gauge and Court), were running parallel recruitment systems. Advertising in the local paper was the most active and employer-led alternative to reliance on MGTS. Not only did it involve the employer taking the first move, (as

opposed to, say, direct applications - where the applicant started the ball rolling), but it was a public challenge to the MGTS system. The MGTS knew about lads being taken on by firms giving preference to employees' sons; my talks with the MGTS supervisors confirmed this. But this was a relatively covert operation. Advertising in the local paper gave the overt impression that some firms believed they could not rely on the MGTS' recruitment system. It was an implied criticism in the public domain. As noted in Chapter Four, the MGTS staff were well aware that some firms only joined MGTS to help them escape paying the EITB levy. This convenient arrangement may have induced them to want the best of both worlds; to avoid levy payment but keep control over recruitment.

Clients and Customers First

The other third-equal most important alternative source of recruitment was to take on the sons or relatives of customers or clients. As Hills Gears noted:

'One we recruited ourselves from another factory, a customer's son, who we did a good turn for. He had a son who was just leaving school.' [Research Notes].

Here, recruitment and apprentices become pawns in a larger game. Labour power strategies become subservient to wider market strategies. But this makes the former entirely anarchic. Test results, indeed criteria and procedures as a whole are dumped, in order to do customers and clients a good turn. All of this depends on employers keeping tight control of the recruitment process. Rollogears gave the impression that customers' sons were a very common source of recruitment. The interviewee at Rollogears said that the firm recruited sons:

'...of people who were customers of this firm, you know - an awful lot of customers' sons.' [Research Notes].

H. Smith (Tools) was reluctant to talk about it, adding only that the sons of 'business acquaintances' were recruited. The impression received from these firms, and also some of the small non-MGTS firms who admitted to

recruiting apprentices from customers'/clients' sons, was that either they did it in return for some past business favour or they did it in expectation of reaping some market advantage. Where the cementation of business partnerships, deals or contracts or future market opportunities was involved the formal recruitment procedure would go by the board and apprenticeships would be handed out like presents, largesse or slush fund equivalents.

(v) Conclusions and Analysis: A Question of Control

In this chapter it was argued that test failures that were taken on were not generally coming from the MGTS procedure itself. Rather, they were coming from MGTS firms who subverted this procedure for a variety of reasons outlined in Sections (iii-iv). These sections put the employers' complaints about the numeracy and literacy skills of applicants in a clearer perspective. They show that a significant minority of MGTS firms were willing to recruit young people whose numeracy and literacy skills, general intelligence, mechanical physics and spatial conjunction skills - the B1-B5 test elements - had been defined as inadequate by MGTS, sometimes against the advice of MGTS. This was not because there were not enough applicants at MGTS with the required test scores, as there were EITB boys with good scores, and the campaigns run by the CCS brought in more than enough applicants with good test results. It was deliberate policy for complex reasons given in Sections (iii-iv). In terms of labour power strategies it sometimes made little sense, despite the justifications given, but then it was done for other reasons to do with labour control and market strategies, though for others (those who attempted to gain a competitive edge or find applicants with better work attitudes) labour power policy was ostensibly to the fore. In relation to work attitudes the labour power policy was to go for those with the best possible work attitudes over and above test scores. All this was almost exclusively happening in relation to craft applicants. Not so many risks were taken on test scores for technicians. College courses and demands limited alternative recruitment strategies for technicians.

In all the alternative sources of recruitment the common strand was employer

control over the recruitment process. Control was wrested back from the MGTS for a variety of reasons. The main ones were: to ensure that recruits had good work attitudes; or that they were committed to working in that particular firm; or to win over key workers or union members or to cement relationships with these significant others; or to try to obtain market advantage or in recognition of ongoing or past business relationships.

Some of these strategies involved taking on apprentices who, quite simply, should never have been taken on, and would not have been taken on had they gone through the MGTS procedure. It is doubtful whether apprentice No.6, with a test score of only 59 would have been taken on by Parkinson Bros. if his father had not been one of the firm's directors. Hence, when Roger Gilbert, Ken Wardle and other senior MGTS staff complained that school-leavers coming into engineering had poor mathematical skills they should have considered that this might have resulted, in part, from their member firms' recruitment policies. About a third, (and this is probably an underestimate of the actual figure due to the reluctance of some firms to admit to subverting the formal procedures), of their member firms in the CEES were taking on 'test failures' and the same proportion were using alternative sources of recruitment. Under these circumstances it would have been surprising if there were no complaints from MGTS supervisors about first year off-the-job trainees with deficiencies in the 3R's and especially maths. Rather than look to the employers for an explanation of this situation Gilbert and MGTS pinned these deficiencies on the schools, parents or the young people themselves.

Certainly MGTS supervisors had a clear appraisal of the situation. They knew that firms were dodging the formal requirements in various ways and recruiting lads through the 'back door'. It was they who had to deal with the results of this situation on the first year off-the-job training. The MGTS supervisors ran a remedial maths group on the first year off-the-job course, and it would seem that the policy of some MGTS of recruiting outside MGTS procedures, without regard to test scores, contributed substantially to the necessity for such measures. MGTS supervisors had to struggle with the consequences of the anarchic labour power and recruitment strategies of

member firms. Indeed, it was one of the supervisors who suggested that I look at the Apprentices' Records to view the extent of firms taking on test failures. With this minimal approval I carried out a substantial study, and as the evidence shows, the MGTS supervisors' complaints about 'back door boys' were well justified.

Senior MGTS staff must have been aware of the situation, 'especially Ken Wardle who was involved in actual recruitment. However, 'public relations' precluded criticisms of member firms' recruitment policies. Such criticisms, especially if they eventually found their way into the local press, might result in firms withdrawing from the MGTS recruitment consortium, with a resulting loss of fees. There was tacit acceptance of the position that, in the last instance, it was the firm that had ultimate control over recruitment. As some of the MGTS staff reminded me on a number of occasions, it was the firms that employed the MGTS. Therefore, they could ultimately do things their way.

The issue of control over recruitment was more to the fore in MGTS firms than non-MGTS firms as MGTS member firms were in the position of having to assert their priorities over MGTS's concern to make sure that only apprentices of a certain standard were recruited. For non-MGTS firms the issue of control asserted itself most readily in relation to the CCS. A similar relationship emerged as with those MGTS firms who took the line that **their** priorities were more crucial than the general requirements of the MGTS. Non-MGTS firms took great pains to ensure that the CCS did not interfere with their overall recruitment policies. To this extent they used the CCS sparingly and cautiously. The next chapter examines how non-MGTS firms used the CCS. It is argued that there were certain similarities, but also certain differences, with how some MGTS firms approached the MGTS. In both cases control of the recruitment process was the main issue.

Chapter SeventeenISSUES SURROUNDING THE CONTROL OF RECRUITMENT: USE OF THE CAREERS SERVICE(i) Introduction

In this chapter it is argued that crude figures on Careers Service use are misleading. The ways and the depth of use are crucial to an understanding of the Careers Service as a recruitment channel. The relationship between CEES firms and the Careers Service on the one hand, and MGTS on the other, are compared. It is argued that the relationship between CEES firms and the Careers service was far more loose. First, the Careers Service was not used much. Large firms used it only when they had to in 'emergency' situations. They tended to use the Careers Service only for technician recruitment and to use it less in times of recession (as there were more applicants about). Smaller group A-C firms made more routine use of the Careers Service, but hardly any relied on it entirely. Those firms using it attempted to make sure that applicants sent down by the Careers Service conformed to **their** criteria on qualifications and interest in engineering (mainly) and other specific criteria. Criticism was launched at the Careers Service on this score; they often sent applications who did not meet these criteria. Hence, it seems that the CEES firms had a fair degree of control vis-a-vis the Careers Service regarding the extent to which they could interfere in the firms' recruitment processes. They could decide if, when, and to some extent how, to use the Careers Service. Yet, on this last point, **how** to use the Careers, the Careers Service did not always go along with the firms' decisions regarding **quality** of applicants. Thus, the firms had much less control over the type of applicants received. Lacking the financial leverage that they had over MGTS the firms using the Careers ultimately had far less control over the type of applicant received. The Careers Service would not collude in sending white male candidates only. But, crucially, the Careers Service had the young persons' interests as paramount. The MGTS catered essentially to the firms' requirements.

For the MGTS the situation was different. First, MGTS firms could always

withdraw from the scheme (at least for recruitment) if the recruitment priorities of the MGTS appeared to come into conflict with and override those of the firm. Secondly, it was used as a service. But most important of all, the MGTS firm could subvert MGTS recruitment procedures and bring in apprentices from other sources. As we saw, MGTS firms did this for a variety of reasons, but two main strands ran through nearly all of them. Either the MGTS firm wanted to give preferment to certain categories of applicants (employees' sons and relatives, or clients/customers' sons/relatives and preferment to the sons/relatives of prominent or influential trade unionists) often with little regard for MGTS procedures and criteria; or they attempted to attract better applicants (typically those with better work attitudes) than the MGTS seemed able to provide. Preferment, (on various grounds) and seeking applicants with good work attitudes and also craft applicants who were 'practical' and had 'got it in their hands' were the main motivations for bringing in recruits with little reference to MGTS criteria. The MGTS appeared to tolerate it. The supervisors on the MGTS first year off-the-job training centre had to cope with the consequences. Significant numbers of first year apprentices had failed the MGTS tests and/or not reached their own firms' or the MGTS' qualifications criteria. Result: the MGTS Supervisors ended up running a remedial maths course for 18 of their apprentices on first year off-the-job training for 1980/81 [Research Notes:Apprentices' Study]. Subversion of MGTS' recruitment procedures and criteria would seem to be the central factor involved in firms taking on apprentices with relatively poor English and mathematical skills. Comparison between how CEES firms used Careers and MGTS begins in the next section which examines the extent of Careers Service use.

(ii) Careers Service Use

Altogether 31 (29%) firms used the Careers Service for the recruitment of apprentices. Of these, all but one firm (Supertool and Gauge Co. Ltd.) were non-MGTS firms. Use of the Careers Service was relatively high in the larger group D-E firms - see Table 17.1. The low use of the Careers Service in

group B-C firms is mainly explained by the fact that most of these firms were MGTS firms, and hence had no real need to use the Careers Service. However, behind these basic statistics there were crucial differences as to precisely **how** various firms used the Careers Service. The following observation can be made: large D-E firms used the Careers Service only when forced to by certain circumstances, whereas the smaller firms used the Careers more as a matter of routine for the recruitment of all apprentices. Let us examine the details of precisely how large firms used the Careers Service and then move on to an examination of the smaller firms' usage.

The large group D-E firms tended to use the Careers Service very late-on in the recruitment cycle after they had been 'let down' by young people who had apprenticeship places but had either withdrawn very late (to go to another firm or another career or to go back to school), or did not materialise when they were to start with the firm. In these circumstances the large firm might either contact people on the reserves list or go straight to the Careers Service to fill up empty places. If those on the reserves list had been fixed up with other firms then the Careers Service would be the last resort. Large firms only used the Careers Service if they **had** to. Imperial Carriers noted that they only used it:

'...when we get desperate during June, July, August - and we've been let down..[by young people withdrawing from apprenticeships offered:GR].
[Research Notes].

The Careers Service was simply not required where professional recruiters were present; they had the resources and training to do without external interference. Thus, for big firms the Careers Service was used only in extreme situations:

'We did [use them] one year, when a change of policy on the numbers of apprentices, at the eleventh hour, required us to recruit more,.. by which time we'd exhausted all our lists...That was a one-off situation.'[Conquest International:Research Notes,employer's emphasis].

Given this type of situation amongst the large group D-E firms, the data for Careers Service use in Table 17.1 is misleading, for all 8 of the group E firms and 2 out of the 4 group D firms used the Careers Service similarly to Conquest International - at the end of the recruitment cycle, when all else

Table 17.1 : USE OF THE CAREERS SERVICE - BY SIZE OF FIRM

SIZE OF FIRM	YES (Firm DID use Careers Service for Apprentice recruitment)		NO (Firm DID NOT use Careers Service for Apprentice Recruitment)	
	No. using Careers	% using Careers	No. NOT using Careers	% NOT using Careers
GROUP A, to 50, (n=49)	15	31	34	69
GROUP B, 51-100, (n=13)	1	8	12	92
GROUP C, 101-500, (n=25)	3	12	22	88
GROUP D, 501-1000, (n=10)	4	40	6	60
GROUP E, 1001+, (n=10)	8	80	2	20
ALL FIRMS (n=107)	31	29	76	71

had failed. In actual fact, although 80% of the firms in group E said they used the Careers Service in the recruitment of apprentices, none used the Careers in a routine, structured way. The Careers Service was not seen as part of these firms' recruitment procedure. It was a back-up channel of last resort. The use of the Careers Service by the 8 firms was intermittent and casual. The proportion of all apprentices recruited by these firms which came from the Careers Service was small. Of the 4 group D firms that used the Careers Service 2 firms, (Altex Engineering Ltd and Deltron Radiators Ltd.), used the Careers in a similar fashion to the 8 group E firms. Burfield Engineering used the Careers almost exclusively for technician apprentice recruitment only, as:

'Technician applicants tend to be a little bit thinner on the ground.' [Research Notes].

Furthermore, Burfield admitted to only occasional use of the Careers service for technician recruitment. Indeed, this particular feature was the second pattern of Careers Service use; firms used the Careers Service largely in relation to technician recruitment. Technician applicants usually applied to MGTS and smaller firms just in case they did not get the required qualifications at the large firms for technician entrance. Technicians in the Apprentices' Study had done this. Some of these held places in one or more of the big firms and perhaps a few smaller firms. When the exam results

came out, and if they obtained good grades, then they withdrew from the places held at the smaller firms and other large firms, and these firms had to rush round at the last minute to fill technician places in time for the beginning of the off-the-job training. It was at this point that the Careers Service were called in to fill the gap.

The other group D firm which used the Careers Service, Olmec Machine Tools, exemplified another pattern of Careers Service use. This was to use the Careers Service for apprentice recruitment in 'normal' circumstances but not in the conditions of the late 1970s when youth jobs were scarce. There had been simply no need to use the Careers since the late 1970s. This pattern of Careers Service use was also taken up by a few small group A firms. Indeed, in the circumstances of the 1970s it was sometimes the case that the Careers Service would try to persuade engineering employers to take on more apprentices rather than the firms banging on the Careers Services' door in Greyfriars Lane desperate to fill apprenticeship places. Passmore Turbines' use of the Careers for apprentice recruitment did not always appear to be initiated by Passmore. The Careers sometimes made the first move:

'Oh yes. They ring us up and say... 'We have a good boy who's interested in an apprenticeship', and we say: 'Well, send him along'. Or, we say: 'He can come in after we've got a report from his school.' [Passmore Turbines: Research Notes].

Such firms felt that they were being pestered by the Careers Service to take on lads they did not require. But in these situations the firm usually kept the Careers at arms length. No evidence was found which suggested that the Careers Service were very successful in their efforts to place young people in apprenticeships through forceful persuasion with the exception of Passmore Turbines. Passmore was one of the few firms in the City that were expanding and still taking on adult workers in 1980/81 - a possible explanation for the attention of the Careers Service.

Taking into account those firms that seemed to have followed one or more of the various patterns of Careers Service use described above, then the extent of routine use of the Careers for apprentice recruitment was rare indeed. 'Routine' use is defined as where a vacancy arose the employer would, as a

matter of course, contact the Careers Office in Greyfriars Lane and ask them to send down 'X' suitable young people. From an examination of the qualitative data it can be ascertained that none of the group D-E firms who used the Careers did so in a routine manner. Of the 3 group C firms that used the Careers only Carbury Ace did so in a routine way. The one group B firm that used the Careers Service also used them in a routine way. Routine use of the Careers Service was largely a group A phenomenon - 11 out of the 15 group A firms using the Careers used them routinely. Only three firms used the Careers Service **exclusively** for apprentice recruitment: Oldthorpe Gear Grinding Co. and Tudor Panels (group A), and Northside Gear (group B).

In summary: the firms in the CEES did not make much use of the Careers Service for apprentice recruitment. Although nearly a third of the sample firms used the Careers, only 13 firms, (12% of all CEES firms and 42% of all using the Careers), used the Careers in a routine way. The rest used the Careers Service intermittently, for the occasional recruitment of technician apprentices or as a back-up system or for use in exceptional circumstances, and finally depending on the state of the local youth labour market. Thus, Table 17.1 misleads as to the extent of careers service use if taken at face value. Only three firms used the Careers exclusively, using no other source of recruitment.

(iii) Pre-selecting on the Firms' Criteria

As well as asking the sample firms if they used the Careers for apprentice recruitment, those giving a positive answer were also asked if the Careers Service pre-selected people sent down according to the firms' criteria. Those giving a positive answer to this question were asked what the criteria were. Out of the 31 firms who used the Careers Service, 29 (94%) told the Careers Service to pre-select applicants according to certain criteria. Only one firm left it up to the Careers Service entirely as to the sort of young person that should be sent to the firm for interview: A.X. Ltd., a Group A firm. One other firm, Star Patternmaking, was not able to answer this question: the firm had only recruited one apprentice at the point of

interview and no formal procedure was required as the young person recruited was the employer's son. Careers would be part of the procedure for apprentices recruited outside the interviewer's relations according to the Star interviewee - which was why it was categorised as a firm using the Careers Service.

The idea of instructing the Careers on pre-selecting applicants was to try to ensure that only suitable candidates were sent to the firm for interview. Qualifications, the general requirements of the firm, was of overwhelming importance. Nearly a half (49%) of all firms who instructed the Careers to pre-select told them to send only candidates with certain qualifications. As many of the larger firms used the Careers right at the end of the recruitment campaign the actual qualifications would probably be available then. After that 'interest' was important; either in the job or the trade (17%) or engineering in general (14%). Whether a young person was doing maths at 'O' level/was good at maths was also important (14%). The only other criterion of pre-selection to figure prominently was whether they did metalwork at school (10%) - and this was largely an interest indicator. Generalising, it could be said that the employers used the Careers to pre-select on qualifications and interest.

(iv) The Employers' Critique of the Careers Service

A substantial amount of criticism was received from the 29 employers involved to the effect that the Careers Service seemed to largely ignore the pre-selection criteria laid down by the firm. A common complaint was that, 'they send anyone down'. As Power Engineering put it: 'It doesn't matter what you say to Careers!'[Research Notes]. A typical comment from a large group E firm, Transco, was that:

'... Well they do send anybody down! We ask them to [Pre-select:GR] but they send down anybody!'[Research Notes, employer's emphasis].

This question also sparked-off other criticisms of the Careers Service. A common criticism was that young people put forward by the Careers for interview frequently did not turn up. According to the interviewee at Sarlin

Engineering, the last time the firm had occasion to use the Careers they:

'...said they'd send six people along but nobody actually turned up. They gave me their names and what time they'd be here - but none of 'em turned up.' [Research Notes].

This gave the employers the impression that young people on the Careers Service books were 'riff raff' (Frith and Buckley:1978). On the other hand, a few firms, mainly small group A firms, criticised the Careers Service for sending down too many for interview. For example, Oldthorpe Gear Grinding complained that the Careers had sent down 20 for just one apprenticeship.

But the most common criticism was that pre-selection criteria were ignored. According to Viking Patterns the Careers Service not just ignored pre-selection criteria but sent down someone totally unsuitable to work in a patternmaking shop; an asthmatic. The most forceful criticism came from Imperial Carriers:

'They send anyone that they've got on their bloody books down! Never 'eard of CSE sixes or sevens! That's what they sent me last year! I didn't even know they existed!...(Laughs)..' [Research Notes].

Imperial, remember, were looking for applicants who would become a new breed of supercraftsmen. Indiscriminately sending down young people annoyed CEES employers using the Careers Service most of all.

(v) Discussion - The Question of Control

These criticisms only partly explain why so few employers in the CEES used the Careers Service and why even fewer used them on a regular, routine basis. Clearly, one factor was that the 47 MGTS firms had no real need to use the Careers; MGTS provided a more comprehensive service than Careers. The MGTS were also specialists. There was criticism that the Careers Service did not know enough about the particular trades involved in engineering.

As opposed to firms using the MGTS, firms using the Careers found it easier to use the Service in a casual way. MGTS firms were buying a total package of services, (assessment, testing..etc.). The Careers Service was free; there were no financial or moral obligations. Certainly on the latter

score, some of the MGTS firms were cagey about going into details about how they were dodging the MGTS entry requirements for apprentices. Firms using the Careers Service did not have to squirm in the face of these moral dilemmas. On paper they had more control over the recruitment process; they instructed the Careers Service as to the sort of young people they wanted as apprentices, whereas (in theory) the MGTS firms were sent young people who, in the first instance, had to conform to MGTS standards. In practice it was not as straightforward as this.

It appeared that Careers did not always follow the instructions on pre-selection. This may have been partly a result of putting the clients' (young peoples') needs first and sending young people to interviews at firms where, although they did not match some of the employers' pre-selection criteria, they were generally keen and interested in engineering or the trade in question. David Gay, Assistant Principal Careers Officer, Coventry Careers Service, noted that the main aim of the Careers Service in Coventry was to try to find suitable employment for each young person.^[1] Careers Officers visited all the large firms and as many of the smaller ones as they could get to, to determine the sort of young people that would be suitable for particular jobs. However, in practice there could have been some differences of opinion between employers and the Careers Service as to whether particular young people were suitable.

As I did not go into the question in depth with either the Careers or the employers, the real reasons why employers perceived a mismatch between the type of young person they asked the Careers to send and the type of applicant they received must remain a matter of conjecture. Taken at face value, there was a belief amongst the CEES firms using the Careers that such a gap existed and the Careers were to blame. The consequences for any actual mismatch would differ according to how the firm used the Careers service. For those few firms which relied exclusively on the Careers Service it could have been a problem as there were no alternative sources of recruitment in the formal procedure. In fact it was not likely to be a problem; these firms set their demands at a very low level. Of these three firms only Oldthorpe Gear Grinding complained about the Careers Service -

but only for sending too many applicants. For firms that used the Careers Service in a routine way, (but not exclusively), it was less of a problem as they could readily turn to other sources. However, a mismatch could be very problematic for those firms who used the Careers Service casually to top-up their numbers at the end of the recruitment cycle. Faced with apprenticeship applicants who did not match their requirements, these (mainly large) firms would either have to lower their standards or go short on numbers. They reacted differently according to: how desperately apprentices were required; the strength of the 'professional ethics' of the recruiter; the state of relations between the training or personnel department and other departments; the degree of autonomy (on the training budget especially) of the department recruiting the apprentice and a host of other factors. At Orion Products the apprentice recruiter would not '...lower standards. I would rather be lower down on my intake.' [Research Notes]. But other large firms would make compromises on 'standards', especially for craft. The main point was that for this pattern of Careers Service usage any mismatch between the requirement of the firm and the quality of applicants supplied by the Careers Service would cause problems.

For MGTS users the situation was different. They knew, if they followed the MGTS procedure, that they would get, first of all, applicants that met the criteria of the MGTS. But secondly, they were generally satisfied that the MGTS had made efforts to meet their particular needs once the general criteria had been satisfied. In discussions with Ken Wardle it was emphasised that the MGTS took great pains to ensure that, once applicants had been selected up to the general requirements of the MGTS (on test scores, qualifications/projected grades and interview performance), then the specific requirements of each firm were taken into account as far as possible. If customers were not satisfied they could withdraw from the scheme, and failure to fill a place at a firm meant lost fees for the MGTS, as the MGTS were paid a fee by the firm for each apprentice successfully placed with the firm. Thus, there was some control and accountability. With the Careers Service user this monetary control on performance was absent. The MGTS ethos was radically different; in the first instance the MGTS was

accountable to the EITB for setting the general standards, (and from which it received the bulk of its finance), and then to the employers. The Careers Service put the young person first, although acknowledging that employers, ultimately, had to be satisfied otherwise they would eventually discontinue using the Careers Service. But the accountability of the Careers Service was lower insofar as they were not limited in their policies by a clear, unambiguous financial tie to the employer. Employers could try to influence the working of the Careers Service; letters to the 'Coventry Evening Telegraph', lobbying councillors or setting in motion their informal and formal contacts with representatives of the LEA (on the various Education Committees that had engineering representatives on them). But all this was more time-consuming and less likely of success than threatening to cut off the flow of money.

The question of control over the recruitment process was different as between MGTS and the Careers Service. With the former the employer ceded a substantial amount of control to the MGTS whilst nevertheless, because of the nature of the relationship between the employer and the MGTS, being fairly confident that his recruitment needs would be met as it was in the interests of the MGTS to meet these needs. Not only would recruitment fees accrue but it would help to fill up the MGTS first year off-the job training school. However, on occasion MGTS firms dumped the MGTS criteria in favour of either their own recruitment criteria or even considerations other than taking on 'good apprentices' (such as the market leverage gained by taking on customers' sons who failed MGTS tests). Careers Service users on the other hand, ceded little control of the recruitment process to the Careers, except in rare cases where firms only recruited from Careers and used no other source. Careers Service users gave a smaller slice of the recruitment action to the Careers Service but they had much less leverage as to how the Careers Service delivered their services. Ultimately it was probably this fact which explains why the Careers Service usually played a small role and was kept at arms length. Neither did it have the advantage of the MGTS that users could get exemption from EITB training levy.

Chapter EighteenISSUES SURROUNDING THE CONTROL OF RECRUITMENT: ADVERTISING STRATEGIES(i) Introduction

Chapters Sixteen and Seventeen were about how MGTS and non-MGTS firms exerted control over those aspects of the recruitment process where external agencies impinged; respectively MGTS and the Careers Service. These chapters demonstrated how the firms' priorities were asserted as against those of the MGTS or Careers Service and how specific employers reacted to the challenge to 'managerial prerogatives' in ceding aspects of the recruitment to these agencies. But there are other recruitment channels which need to be considered in terms of control. There was manipulation of some channels to attempt to control the flow of applicants to the firm, either the number or type. The former was difficult. It was attempted by a few of the large group D-E firms through reducing the advertising for apprenticeships. It appeared to have little effect. The large firms got hundreds of applications whether they advertised or not.

Controlling the type of applicants was mainly a phenomenon of the smaller firms, though a few of the larger firms seemed to do it. In essence, advertising policy was designed so that certain groups (typically employees relatives) were more likely to hear about the apprenticeships than young people in general in Coventry. The emphasis was on **internal** advertising of apprenticeships - through word of mouth or notices in the factory.

The second type of control has rightly received substantial coverage in the literature as it touches on wider issues of recruitment and labour power strategies. First, the essential unfairness involved in this recruitment strategy has been noted (Roberts:1984; Doyle:1988). As Roberts (1984) has commented, for young people since the Second World War the process of getting a job has depended basically on luck and who their parents knew and which jobs they heard about on the grapevine. Carter (1962) found that a third of the boys and a fifth of the girls obtained their first jobs through

parents and other relatives. Finn and Markall (1981a) and Finn (1984) reported that the majority of young people they studied in Salford obtained jobs through informal networks. Whilst Jenkins (1983) reported between 41-54% of the three groups of school leavers he studied in Belfast got jobs through personal contacts. Finally, Hohn (1988) reports that American and British studies have consistently shown that the importance of informal networks also extends to the adult labour market where between 60-80% of jobs result from informal contacts. The general unfairness of reliance on informal networks, word of mouth and restricted channels such as factory noticeboards can have specific consequences for some groups.

This last point leads to the second point; where the workforce is already all or overwhelmingly white, then exclusive or substantial use of restricted recruitment channels leads to the perpetuation of employment opportunities in white hands. As the Commission of Racial Equality (1982) pointed out in its Massey-Ferguson report, such methods of 'advertising' were likely to contribute towards the maintenance of a white skilled workforce as black young people were less likely to know about apprenticeships in firms where most or all workers were white.

Thirdly, using restricted recruitment channels may work to the disadvantage of female applicants. Coyle (1982) shows how recruitment through informal channels in the clothing trade results in men getting the skilled cutting jobs. Whilst Doyle (1988), using Equal Opportunities Commission (EOC) research, shows how word of mouth networks are used to keep women out of senior positions. In terms of engineering apprenticeships, the informal network and word of mouth recruitment worked to the advantage of boys. It was always the sons of skilled workers that received preferment, or clients', customers' or directors sons, never their daughters. We will return to these points in more depth in Chapter Twenty-two. The important point to note is that there is a relationship between the manipulation of recruitment channels by employers and their policies and attitudes towards employing blacks and females as apprentices. The former both reflects and reinforces the latter.

A number of commentators and researchers have pointed to the influence of informal networks and word of mouth recruitment specifically in relation to apprenticeships. Goldstein (1984) has noted that there was a long history of apprenticeship vacancies being filled by the sons and nephews of craftsmen up to the 1960s. Carter (1962) showed that the Youth Employment Service was generally only used by employers as a last resort when informal networks failed. Roberts (1984) has argued that being 'spoken for' by a relative or friend is '...still an important route into apprenticeship.'(p.37), not something that died out with the 1964 Industrial Training Act. Keil and Newton's (1980) research showed that family contacts were rarely used in the recruitment to non-manual youth jobs, but were used relatively often to recruit to apprenticeship, whilst Hohn (1988) has shown the persistence of recruitment to apprenticeship by word of mouth channels in West Germany.

Researchers and commentators in Coventry have noted the strong attachment to word of mouth recruitment through informal networks, both in general and in particular industries. Hoel (1982) has shown that in the recruitment of Asian women to sweatshops in the City the most common recruitment channel was by word of mouth, through existing workers and the family and friends of the employer. We have already noted that the Commission for Racial Equality (1982) found that word of mouth and other restricted channels were used even in large firms in Coventry for apprenticeship recruitment. Graham (1983) also suggests that racial discrimination works in large engineering firms in the City through workers being told about jobs through family and friends. Research carried out by Courtenay (1980) in the adult labour market showed that the most common way in which workers found out about the jobs they were in in Coventry was through friends and relatives who worked in the firm in question - a third found out about their job through this channel. For skilled work, 29% of white employees and 19% of black employees in Courtenay's sample found out about their jobs through friends and relatives who worked in the firm. For white skilled workers this was the most common job-finding channel. For blacks, less locked into the informal network for skilled work, directly contacting prospective employers was the most common channel and there was heavier use of job-finding agencies - Jobcentres and

employment agencies. Courtenay's (1980) research shows that word of mouth recruitment to skilled work in Coventry favoured whites over blacks as they were more locked into informal networks.

These points should be kept in view as we examine the advertising strategies used by the CEES employers and also in relation to Chapter Twenty-two when the general issue of the employment of black and female apprentices is examined. The next section examines the general advertising strategies of non-MGTS firms. MGTS firms, in theory, had no need to advertise, so were not asked questions on this issue. However, as we saw in Chapter Sixteen, subversion of official MGTS procedures was rife and apprentices were recruited through channels other than MGTS, and hence questions on advertising apprenticeships would have been pertinent. Although non-MGTS firms advertised their apprenticeships most commonly in the Careers Centre, followed by the local press, Section (iii) shows that 'Word of Mouth', the third most important channel overall, was held to be the most effective channel. Section (iv) shows the employers' perceptions on the effectiveness of various channels in bringing in applicants were largely correct. There we see that MGTS apprentices relied heavily on informal networks and word of mouth knowledge and the grapevine about specific apprenticeships and the MGTS procedures and then the official agencies, Careers Service/Officers and Careers in School/Careers teachers. Written sources of advertising figure little apart from a locally famous booklet produced annually by the Careers Service on engineering apprenticeships in Coventry and Warwickshire. The final section draws out some of the main issues in preparation for Chapter Twenty-one.

(ii) Advertising Strategies

The non-MGTS firms were asked if they advertised their apprenticeships in various ways. The Careers Centre was the most widely used repository of advertisements for engineering apprenticeships. It was used by just over two-fifths (43%) of non-MGTS firms. The second most widely used form of advertising for engineering apprenticeships was to place an advert in the

'Coventry Evening Telegraph'. Nearly a third (30%) did this. The relatively low number of firms advertising apprenticeships in the local paper was a result of two factors. First, there were examples of group C-E firms who said that in 'normal' circumstances, where there were not so many unemployed young people about, they would advertise in the local press. But in the conditions of the late 1970s and early 1980s advertisements would bring in far more applicants than the firm could handle (just in terms of replying to letters). They easily attracted enough applicants with the minimum of advertising. Secondly, for those firms that concentrated on recruiting through 'personal' sources, (friends, employees, clients, customers) such advertising would be pointless. In these firms, (typically small group A firms), advertising in the public domain was unnecessary when 'private' sources were preferred. Indeed, exactly a quarter of all non-MGTS firms advertised their apprenticeships by 'word of mouth' - almost all of these being small group A firms. It was the third most common channel used for all non-MGTS firms. It involved telling employees (sometimes only **certain** employees typically skilled men who were perceived as good workers), friends, customers/clients and relatives, that apprenticeships were available. Using this 'method' of advertising firms could restrict the numbers and type of applicant - especially if few or no other forms of advertising were used. Six firms used 'word of mouth' as the **only** form of advertising for their apprenticeships - all group A firms.

Just over a fifth, (22%) advertised their apprenticeships in local schools. This usually took the form of contacting the Careers teachers in certain selected schools. Employers were very choosy over which schools they notified. Their perceptions of certain schools as 'good' schools, especially in terms of 'old fashioned discipline' (Woodlands School was often mentioned here - a boys-only comprehensive), and their relationships with Careers teachers, determined which schools were contacted. If Careers teachers were viewed as helpful, especially in terms of being honest about particular applicants or in terms of pre-selecting candidates for the firm and fulfilling the firms' criteria ('sending down good lads'), then they would be notified of vacancies. Schools with 'poor discipline' and/or

unhelpful Careers teachers would be avoided. Schools close to the firm were preferred if the above requirements were satisfied.

Nearly a fifth (17%) of the non-MGTS firms advertised their apprenticeships in the 'Jobhunter'. This was a weekly newspaper for the young unemployed in the first instance, produced by the Careers Service. But it was also distributed to all Coventry schools where fifth and sixth formers could use it to watch out for job vacancies, YOP schemes and training opportunities. Of the other types of advertising, only 'Notices in Factory' (12%) and 'Technical Colleges' (10%) were of any real importance. The former was largely a group D-E phenomenon. Browne (1981) found that this recruitment channel increased with firm size. This was the case here too; 38% of D-E firms did it, but only 10% of B-C firms and none of the small group A firms used noticeboards for apprenticeships as they could just spread the word around informally. In the large firms notices were spread about the notice boards in the factory usually saying that various types of apprenticeship were being offered, and closing dates might also be mentioned. A few large firms put up 'Reminder' notices along the lines of 'Apprenticeship applications - only one week to go!' to remind employees' to get their sons/friends to get applications in on time. This was the joint second most common form of advertising for the large firms. Six firms notified their vacancies to the technical colleges. These firms either knew someone in the Engineering Departments of one or more of the colleges or they notified vacancies to the EITB First Year Engineering Training Centre at Henley College, where they could get an apprentice who had already completed their first year off-the-job under the EITB.

Thirteen firms (22%) did not advertise their apprenticeships at all. Generalising, these largely fell into three categories. First, there were group A patternmakers who, to the point of interview, had either taken on sons of the owner of the firm or other close relatives. Secondly, there were a few firms, (mainly group B-C firms), who were still taking on adult workers in the recession as they were doing untypically well and young people, being informed of this by adult friends and relative, were writing in 'just on the off-chance' for apprenticeships. In these circumstances they

found that they had a steady flow of applicants without advertising. Finally, two large firms argued that they received more than enough applicants without advertising. As large firms in the City they were well known - there was no need for it. They were trying to control the excessive numbers of applicants, but without success. Young people applied to them as a matter of course, rightly expecting there to be apprenticeships on offer. The fact that firms such as Orion and Transco had to close their books on apprenticeship applications early in the new year for apprenticeships starting in the summer showed that attempts to control quantity of applications through advertising policy were futile. There was no hiding place for the big firms. But at least they cut advertising costs.

(iii) They 'Heard it on the Grapevine'

The non-MGTS firms were also asked to assess where they believed applicants most commonly found out about their apprenticeships. Of course, this was a largely subjective assessment based on impressions gained at the interview. None of the firms appeared to have done a systematic study of the subject. However, the results were revealing. Despite all the various forms of advertising, 'Word of Mouth' was seen as the most effective form of advertising by the CEES employers. Eighteen non-MGTS employers (30%), believed that their applicants most commonly first heard about their apprenticeships through the firm's employees, friends, relatives and other acquaintances. They heard it 'on the grapevine'. This finding shows why the employers did not advertise apprenticeships more extensively. Apart from the fact that some did not want it generally known that apprenticeships were available and that others strove to cut the numbers of applicants down, they did not believe that public advertising was particularly effective. Thus, only nine of them (15%) thought applicants most commonly first heard about their apprenticeships from the 'Coventry Evening Telegraph', despite the fact that 18 advertised apprenticeships there. They did not view this form of advertising as particularly effective. The 'grapevine' was crucial; even for large D-E firms, 'Word of Mouth' was believed to bring in more

applicants than any other channel.

It was not informing as many young people as possible that the firm was taking on apprentices that was the problem, but rather reaching those that were interested in engineering. This explains why the Careers Service/Officers was seen as being the second most effective channel (mentioned by 18%) in producing applicants. The same would apply to Careers Teachers in schools (mentioned by 12%). They siphoned out those interested in going into engineering according to the employers, (despite what they had said in the previous chapter). Overall, the results indicated that the employers did not believe that published sources of advertising were very effective as recruitment channels; 15% mentioned the local paper, 4% a careers booklet, CCS (1979a), which gave information on local engineering apprenticeships and one (2%) mentioned the 'Yellow Pages'. Rather, they took the view that young people had largely been told about the firm's apprenticeships (by Careers Officers/teachers, friends, Dads...etc.) as opposed to reading about them in newspapers or Careers publications.

Finally, 13% said that applicants had most commonly written in 'out of the blue'. When asked what this meant, three main answers emerged. First, large D-E firms believed that they were widely known in the City as 'one of the big engineering firms' and that young people interested in engineering apprenticeships would write in to them as a matter of course. By just living in the City, knowing people who either worked in engineering or in the particular firms, or reading about them in the 'Coventry Evening Telegraph' young people got to know which were the 'big firms'. Secondly, three group A firms argued that they largely received applications from young people living near the firm. Finally, Wingfield Transmissions said that it was on a main bus route which was used by a lot of school pupils that prompted 'out of the blue' type applications. Thus, location was seen as important.

However, the significant finding was that employers placed great emphasis on 'Word of Mouth' in bringing applicants to their firms. Applicants heard about apprenticeships 'on the grapevine' as opposed to finding out about them through public advertisement. Employers passed the message on to

employees, friends, customers, relatives and these in turn told others. This was the pattern in the small firms in particular. But when employers talked about applicants finding out through 'Word of Mouth' they sometimes had another process in view. In the larger firms, where there were always apprenticeships going, young people would find out in a more generalised process from the firms' employees, fathers, other relatives and friends telling them which were the big firms and knowing neighbours who worked for the big firms. Hence, when the larger employers talked about applicants finding out through 'word of mouth' they often had this second process in view as well as the first which was initiated by themselves. The following sub-section examines whether the employers' beliefs on where apprentices first heard about their apprenticeships were well-founded.

For MGTS firms the situation was different. In theory, advertising and information-giving was carried out by the MGTS in the first instance, on behalf of member firms. On this score the MGTS functioned like one big firm; they were highly visible in exactly the same way as the group E firms. Indeed, in terms of the number of Careers Conventions attended, newspaper adverts and appearances in the local media they were as visible as any of the large group E firms. Yet from the individual firm's point of view the question was whether to subsume their relative invisibility beneath their MGTS umbrella or subvert the MGTS procedure and make themselves more visible. The latter were the 15 firms who actively sought apprentices from sources other than the MGTS, such as advertising in the 'Coventry Evening Telegraph' and 'Word of Mouth'.

(iv) How MGTS Apprentices got to Know about their Apprenticeships

Evidence from the Apprentices' Study shows that non-MGTS employers were on fairly firm ground when they claimed that applicants most commonly found out about their apprenticeships by 'word of mouth'. In the Apprentices' Study the apprentices were asked how they had got to know about the apprenticeship they were in. Of course, we should be wary of jumping to conclusions about non-MGTS firms and the CEES sample from data arising from the recruitment of

MGTS apprentices. The recruitment process as between MGTS and non-MGTS firms was quite different in some key respects. But in the case of finding out about their apprenticeships the process would not be too different. The main difference would be that, as we saw, a lot of the non-MGTS firms either did not advertise at all, or, if they did so then they did not do it very publicly. On the other hand, the MGTS always advertised in the local press and were widely known at the Careers Service and in the schools. Given these warnings on reading too much into the MGTS data in terms of its applicability to non-MGTS firms, let us examine it in detail. Table 18.1 provides a summary. This Table examines the answers of 107 apprentices in the Apprentices' Study who were asked how they got to know about their apprenticeships in their firms. If they replied 'through Midland Group' they were then asked how they heard about the MGTS - to get to the ultimate source of information. Table 18.1 deals only with these ultimate sources.

From Table 18.1 we can see that fathers were the commonest source of information. This was where the 107 most frequently got to know about the apprenticeships at their firms/the MGTS. Apprentices whose fathers were in engineering particularly quoted this source of information. Their fathers could look out for openings for them in their own firms and also they would know more about the local engineering industry and its recruitment patterns in general. Taking all the 'personal' sources of information together, then nearly two-fifths of all the 107 apprentices received information from these sources. Relatives and friends telling MGTS apprentices about their apprenticeships/the MGTS was quite common. Of the 39 apprentices that discovered there were apprenticeships going at their firms or were told about the MGTS through these personal sources, nearly a half, 19, were told about specific apprenticeships in their eventual firms. Either their fathers, brothers ..etc. worked in the firm and knew about the situation on the ground regarding apprenticeships or their fathers, brothers ..etc. knew someone who told them that apprenticeships were going in certain firms. Fathers were crucial in particular here from the accounts of these apprentices. In the most unusual case, that of the grandmother, she was a friend of the managing director of Stanford Engineering. On the 'look out'

for engineering apprenticeships for her grandson she asked the Stanford director about apprenticeship openings. Getting a positive answer, the grandson was informed, and the application proceeded to a successful conclusion. The other twenty out of the 39 were told about the MGTS in the first instance by their fathers, brothers, other relatives and friends.

Of the 20 that found out about the apprenticeships at their firm/MGTS through the Careers Teacher/Careers at School, a smaller proportion as compared with personal sources were told about specific apprenticeships; 13 were told about the MGTS procedure (65%), and 7 about specific apprenticeships (35%). The 13 found out about MGTS through Careers Teachers or they attended various talks given by MGTS representatives (usually Ken wardle) in careers lessons. The high profile that MGTS had in local schools probably accounted for the fact that 19% quoted this channel as being where they first heard about their apprenticeship/MGTS. The majority of the 107 apprentices had Careers teachers (94%) and Careers lessons (91%).

The other arm of the official Careers Service, the Careers Officer/Careers Service, also figured prominently; 18 discovered their apprenticeships or the MGTS through this source. Of these 18, 7 were told about specific apprenticeships and the other 11 were told about the MGTS. Careers Officers were very familiar with the MGTS set-up, generally held it in high regard and indeed participated in the MGTS recruitment procedure as the MGTS interviews were held there. Thus, it should not be surprising that Table 18.1 should show a substantial proportion of apprentices first hearing about their apprenticeship/MGTS through the Careers Service. Altogether, 64 of the 107 apprentices surveyed had visited the Careers Centre. They had all received interviews with their Careers Officers whilst at school. Out of the 64 that had visited their Careers Centres, 50 had done so for reasons other than just 'signing on' the dole or having their MGTS or EITB interviews there. Analysis of the reasons for visiting their Careers Centres shows that the main reason those that visited the Careers Centre did so was to look at leaflets...etc. on careers, especially engineering. On a visit to the Careers Centre in Greyfriars Lane I discovered a substantial stock of pamphlets on most of the large engineering firms. The apprentices that

Table 18.1 : HOW 107 MGTS APPRENTICES FROM THE APPRENTICES' STUDY GOT TO KNOW ABOUT THE APPRENTICESHIPS IN THEIR FIRMS OR ABOUT THE MGTS, (IF THEY WERE DIRECTED TO THEIR FIRM BY THE MGTS)

How apprentices got to know about their apprenticeship/MGTS.	No. getting to know from...	% getting to know from.. (n=107)
1. Walking round streets looking for work	1	1
2. From Father	21	20
3. Careers Teacher/Careers at School	20	19
4. Careers Booklet ¹	17	16
5. Friends	9	8
6. Other firms ²	4	4
7. From Mother	2	2
8. Uncles	2	2
9. The EITB	1	1
10 'Cov.Evening Telegraph'/'Rugby Advertiser'	2	2
11 Housemaster at School	2	2
12 Brothers	4	4
13 Careers Convention	1	1
14 Grandmother	1	1
15 Worked at firm p/t	1	1
16 'Jobhunter' ³	1	1
17 Careers Officer/Service	18	17
TOTAL	107	102

Notes: 1. CCS (1979a). 2. They went to interviews at other firms, failed the interview, and were advised by the firm to apply to MGTS. 3. Weekly paper produced by the Careers Service. Aimed at 16-18 year olds who were unemployed, but also at fifth and sixth formers at school.

looked at the careers literature were particularly keen to see 'Engineering, Craft and Technician training Schemes in Coventry and Warwickshire' (CCS:1979a), the engineering booklet par excellence, with the addresses of all the major firms. This booklet played an important role; 17 of the apprentices in Table 18.1 said that they first found out about their apprenticeship/the MGTS through this source. This booklet was also in most local schools - although the apprentices said that it often went missing as it was so good, which necessitated trips in to town to look at it in the Careers Centre. Given these facts it was not surprising that it was the fourth most common source of information quoted by the apprentices. On the

other hand, the 'Jobhunter' newspaper made little impact in terms of informing applicants about either specific apprenticeships or the MGTS - it was only mentioned by one apprentice. It was as important as information gleaned from grandmothers.

Comparing how the non-MGTS employers viewed the effectiveness of various methods of advertising with the MGTS apprenticeships or the MGTS (and taking into account earlier warnings) the following conclusions would seem sound. First, the employers seemed to have a fair grasp of the impact of the 'grapevine' in passing on information about apprenticeships. According to Table 18.1 it does appear to be important. Secondly, the non-MGTS employers appeared to have got the impact of the Careers Officer/Careers Service in perspective. However, they appeared to have underestimated the role of Careers Teachers/Careers in School. But is it precisely at this point that comparing the non-MGTS employers' findings on advertising with MGTS apprentices' accounts on how they found out about their apprenticeships/MGTS becomes hazardous. The majority, possibly all Careers Teachers would have heard about the MGTS, as the MGTS would probably have spoken at the school in careers lessons and appeared at careers conventions. Yet detailed knowledge of small group A firms - especially as to whether they had apprenticeships - would be less likely. This comparison has to be handled carefully. The employers appeared to have underestimated the impact of the 'Engineering, Craft and Technician...' booklet. This played a substantial role in orienting applicants towards the MGTS. On the other hand, the non-MGTS employers were quite correct in not mentioning the 'Jobhunter' newspaper; only one apprentice said that they got to know about the apprenticeship/MGTS through the 'Jobhunter'. Apart from the Careers booklet on engineering, written sources of information did not play a great role. Only two apprentices said they found out about their apprenticeships/MGTS through the local newspapers. The relatively modest role given to newspapers by the non-MGTS employers was an overestimate of their real importance.

(v) Discussion: Word of Mouth, Informal Networks and Official Channels

Overall, 'word of mouth' and the official Careers Service, (the Careers Service and Careers at school), played the leading roles. This was largely acknowledged by the non-MGTS employers. Informal networks, the grapevine was crucial. It was recognised as being important by employers and was in fact important according to the apprentices accounts of how they came to hear about their apprenticeships/MGTS. Recruitment through word of mouth had two different but overlapping meanings in the CEES.

First, there was the approach towards word of mouth recruiting as practised in the, mainly, small firms. Controlling the type of applicants was a phenomenon of the smaller firms, although a few of the larger firms seemed to do it. In essence, advertising policy was designed so that certain groups (typically employees' relatives) were more likely to hear about the apprenticeships than young people in general in Coventry. The emphasis was on internal advertising of apprenticeships - through word of mouth or notices being put up in the factory. Amongst those A-C firms that did advertise, the group A firms used 'Word of Mouth' heavily as a form of advertising whereas the B-C firms used it less often. Also the group A firms that used 'Word of Mouth' had a heavy reliance on it. For 6 of the 13 firms in group A that used 'Word of Mouth' it was their only form of advertising. Only one group A firm using 'Word of Mouth' advertised in the 'Coventry Evening Telegraph'. Six of the group A firms using 'Word of Mouth' had only one other method of advertising (usually the Careers Centre). Hence, within the group A firms there was a definable sub-group that largely relied on 'Word of Mouth' for advertising - almost keeping their apprenticeships secret within a coterie of friends, employers, clients, customers and relatives. This usage of word of mouth was employer-led; 'the Word' was given to the select few by the the employer. Access into these firms was highly controlled. Word of mouth recruitment here was part of a policy where restricted recruitment channels were used to regulate the type of applicant - in this case relations and friends of (mainly skilled) employees. Without pre-empting too much of the discussion in Chapter Twenty-one, it can be noted that Jenkins (1983) provides an explanation for this phenomena. He

argues that employers use word of mouth recruitment channels for three main reasons. Firstly, the reputation of the person doing the recommending of their offspring or friends serves as a guarantee for the new recruit as the employer may assume that if the person sponsoring the young entrant is satisfactory as an employee then that increases the chances that the young person will have the right personality traits and work attitudes. Secondly, the mediator between the employer and the young person may help keep the new recruit under control, thus aiding work discipline when the need arises - we shall see examples of this in Chapter Twenty-one. Thirdly, it may be part of a 'family firm' industrial relations policy, and as we shall see, some large CEES firms also ran such policies in recruitment. These points will be developed further in Chapter Twenty-one, but the general point is that word of mouth recruitment was linked to the policy of giving preferment to friends and relatives of employees and that those locked into the informal networks where 'the Word' was passed around were in an advantageous position. As Carter (1962) noted, such a policy may lead to young people being recruited 'through knowing the right people' irrespective of ability for the work, and findings in Chapter Twelve suggested that this occurred amongst MGTS apprentices.

Secondly, the other sense in which word of mouth recruitment had meaning for CEES employers was the generalised way in which knowledge about which were the big firms, which firms had the most apprenticeships and details of apprenticeship application spontaneously passed around the City, from fathers and mothers and friends to (mainly) sons and between young people, supplemented by general information about the large firms in the City in the local press and TV. This generalised word of mouth channel was not employer-led or something employers had much control over. This local, common and popular knowledge about the engineering milieu in Coventry made attempts to control the flow of applicants to the large firms futile. Young people generally knew which the large firms were and that they had the most apprenticeships going, and that working and social life within these firms was generally superior.

Those not part of the networks involved in getting in the smaller firms and

unable to get into the large firms were in a relatively weak position. It was at this point that the official agencies, the Careers Service and Careers at School came in. But as we saw, the Careers Service was more often a general rather than a specific source of information about apprenticeships. Those MGTS apprentices who found out about their eventual apprenticeships through relations and friends were more often told about specific vacancies rather than about the MGTS procedure in general or whether firms had apprenticeships in general. The information gleaned from the former was qualitatively superior as it yielded firmer and more precise information about actual apprenticeships. Those locked into these networks were lucky (Roberts:1984) indeed.

This discussion is deepened when recruitment from family sources is examined in Chapter Twenty-one. This chapter suggested that restricted recruitment channels were linked to preferment for employees' relations and friends. The next chapter shows that strangers stepping outside employers' procedures received scant reward.

Chapter NineteenISSUES SURROUNDING THE CONTROL OF RECRUITMENT: CASUAL APPLICANTS(i) Introduction

Casual applicants were young people who 'knocked on the doors' of engineering firms looking for apprenticeships or other youth jobs. In this way they by-passed large chunks of the formal recruitment procedure. Young people taken on as a result of 'door knocking' are here known as casual recruits. This Chapter shows that the CEES employers were rarely willing to subvert their own criteria to the same extent that they flouted the criteria of the MGTS or resisted attempts by the Careers Service to impose alternative criteria. Their own criteria went by the board when other wider gains were on the table; to gain influence over customers or in the interests of good industrial relations or keeping valued skilled workers or to attain applicants with above-average work attitudes. We saw this in Chapter Twelve in relation to MGTS firms subverting MGTS procedures for their own ends (which sometimes made no sense from the point of view of labour power policies but did in terms of wider strategies), and we had a glimpse of it in Chapter Eighteen with the recruitment of the sons of employees through word of mouth channels, and we will see it clearly in Chapter Twenty-one in relation to taking on both employees' and employers' sons. Employers were willing to overturn their methods and criteria of recruitment on their terms and for their ends; this was a manifestation of their social power. Few employers seemed willing to subvert their recruitment procedures for total strangers, young people desperately roaming the streets for work, where no clear benefit was forthcoming. Casual applicants, door-knocking and Tebbit-style bike-riders, going from firm to firm looking for apprenticeships, were shunned. To take on casual applicants would mean ceding control of recruitment to the Fates. It was also inefficient. In the formal recruitment procedures of many firms, young people could be ruled out on age, qualifications or other grounds well before they were interviewed, thus cutting down interviewing and/or testing

time. Few firms even bothered to interview casual applicants. Door-knocking and bike-riding was a waste of time for those looking for apprenticeships.

(ii) Casual Applicants: Bikers to Get on their Bikes; Walkers to Walk Away

The CEES firms were asked to estimate how often young people had come to the firm looking for work 'just on the off-chance'. They were asked to estimate how many had called at the firm 'in the last year' - the year preceding interview at the firm. The results are summarised in Table 19.1. Nearly a third of all CEES employers said that between one and ten had called round looking for work 'in the last year'. This was the modal range for all size groups. Surprisingly, only 12 firms had over 50 a year and only 7 firms over 60 a year. However, it has recently been shown by Wood and Manwaring (1988) that the personnel managers in their study of recruitment reported a decline in the number of casual callers as the recession of the early 1980s got under way and unemployment increased. This was in the labour market as a whole, but it could be advanced that similar trends would also be observed in the youth labour market and specifically the engineering apprenticeship market in Coventry. With redundancies always in the news and the jobs crisis in Coventry gaining a high profile in the local press in the early 1980s, an atmosphere of gloom may have led some young people to spare their shoe leather and write in instead. The highest estimated numbers of casual applicants in the year preceding interview at the firm were at Transco (group E - between 200-300), Amazon Engineering (group B - about 300) and Court (Manufacturing) Co. Ltd (group D - 100 to 150). Location seemed to play a large part in deciding how many casual recruits firms received. Firms on a prominent site on a main bus route were particularly prone to receiving casual applicants. This was the case with Court and Amazon, and Transco were conveniently near the City centre, only ten minutes walk from the Careers Centre and near a cluster of bus stops. Speedtool Engineering, who estimated that they had received about a hundred casual recruits, argued the above point strongly, and firms that were in remote parts of the City in terms of bus routes or could not easily be seen from the road generally got

Table 19.1 : CASUAL APPLICANTS IN THE YEAR UP TO THE INTERVIEW AT THE FIRM
- BY SIZE OF FIRM

SIZE OF FIRM	GROUP A up to 50 (n=49)	GROUP B 51-100 (n=13)	GROUP C 101-500 (n=25)	GROUP D 501-1000 (n=10)	GROUP E 1001+ (n=10)	ALL firms (n=107)
Estimated No. of Casual Applicants in year preceding interview with the firm	% receiving ...	% receiving ...	% receiving ..	% receiving ...	% receiving ...	% receiving ...
1-10	37	31	28	20	10	30
11-20	12	15	12	10	0	11
21-30	6	8	4	0	10	6
31-40	4	8	4	0	0	4
41-50	0	0	4	0	0	1
51-60	6	0	8	0	0	5
61+	8	8	0	10	10	7
Got some, but could not estimate number	4	8	12	40	10	10
NONE	14	8	0	0	10	8
Didn't Know if there were any or not	8	15	28	20	50	19
TOTALS	99	101	100	100	100	101

low numbers of casual applicants. Certainly it would make sense for applicants to go to easily accessible industrial estates with a high concentration of engineering firms. The Bayton Road Industrial Estate was the one that most fitted the bill on these criteria. Torrington Avenue and the Bodmin Road Industrial Estate were two other areas with a high concentration of engineering firms and reasonably accessible.

Probably the most interesting finding however was that a half of all group E firms did not even know if there had been any casual applicants or not. They never saw them. Unlike the group A-C firms and two-fifths of group D firms, the apprentice recruiters at the other large firms were insulated and isolated from experiencing the hopelessness of young people walking the

streets in search of work. The security systems kept such unpleasant realities at bay. The interviewee at Conquest International said that as far as he knew no young people had called round to the firm looking for work. On closer examination he did not appear to know whether or not the 'Gate' was supposed to report applicants. He went on to explain the apparent lack of casual applicants in terms of Coventry school leavers 'knowing the system', - that they had to send in a form, go through the interviews, tests. Thus:

'...they know it's almost pointless sorta, knocking on somebody's door.' [Research Notes].

Yet if they 'knew the system' what did about 300 knock on Transco's door for, another group E firm? Conquest's reply seems like pure bluff to cover up an embarrassing gap in 'systems and procedures'. A better explanation was that security turned casual recruits away, seeing them off on their bikes, without recruiters ever catching a glimpse of them. This more than anything accounts for the fact that half the group E firms did not know if there were any casual applicants or not.

Small group A firms on the other hand were not so cut off from desperate young people seeking work. With no gates and security staff, sometimes no proper reception area or secretary, callers could at least get to see the employer. On the other hand they had few apprenticeships going. These facts account for the findings in Table 19.1 which show that group A firms were generally in a better position to estimate the number of callers as they had more direct contact with them, but yet a higher proportion than in any other size group reported that they had not received any casual applicants and nearly two-fifths reported that they had received only between 1-10.

(iii) Casual Recruits: Few Are Chosen

The 78 firms who knew whether they had casual applicants were then asked what types of jobs casual applicants were most frequently looking for. Just over a half (54%) of the 78 firms said that casual applicants most frequently looked for 'anything' or 'just a job'. Tudor Panels illustrated

the desperation of many of their casual applicants:

'Anythink...They're in such a desperate state,..that uhm..nobody discusses apprenticeships now. They just want a job. Any job!'[Research Notes,employer's emphases].

Small group A employers, sometimes with no secretaries to sympathetically turn young people away, felt the full force of the youth unemployment crisis in the City. They saw its victims first hand, face to face. It was this question in the CEES, and with the small group A employers, that yielded the most frequent avowals of sympathy with the plight of the young unemployed.

Just under a third (28%) of the 78 employers said that casual applicants most frequently looked for apprenticeships. Few (3%) reported that mainly operative or trainee jobs were specified. This question provided further evidence that the larger employers were cocooned against this experience inside a ring of security personnel, secretaries and receptionists - exactly a third of group D-E firms said they did not know what most casual callers wanted. United Fasteners suggested that I address the questions on casual applicants to the Gateman! The interviewee at Acapulco Cars, whilst not insensitive, just viewed it as a waste of time as:

'They feel that if they go an' show willin', and hoof themselves about, that they'll do better, but...they write to us first. We tell them to write to the company, with details.'[Research Notes,employer's emphasis].

They were wasting their time in ignoring procedure. Auto-Gears believed it was only people with low qualifications that did door knocking. Those that wanted apprenticeships or clerical traineeships usually wrote in and followed procedures. Few were successful in getting apprenticeships using the door knocking method.

The employers were also asked if they had ever taken on any of these young people for apprenticeships. Only five small group A firms had **ever** taken on casual applicants as casual recruits to apprenticeship. Four of these firms had only ever taken on one casual recruit, and the other firm, Day and Hayward (Sheet Metal) Ltd., said that they had only taken on 'one or two' in the past. You had to be lucky to call when there were apprenticeship

vacancies. Most engineering employers recruited in the spring; casual applicants were at their most active in the summer months after school had finished. Therefore, Easter leavers had the best chance if they door-knocked after they left school; but Easter leavers were less likely to have the right qualifications at firms that demanded them. However, the five group A firms that had taken on casual applicants did not set much store by qualifications. Yet casual applicants still had to be lucky as these firms offered apprenticeships only very rarely. Two other firms had not taken on any casual applicants, but had interviewed them for apprenticeships. Again, these were group A firms; Davies-Roche and Z. Designs Ltd. But Davies-Roche's interviews were not the formal interviews that were given to applicants coming through routine channels but quick assessment interviews. The Davies-Roche interviewee had not thought them good enough to bother with a formal interview. Jenkins (1983) found in his study that it was the less qualified 'lad' types that were more likely to be casual callers as the unskilled jobs they were after were less subject to the gate-keeping patronage of apprenticeships. If this was happening in Coventry too in relation to youth jobs in engineering then Davies-Roche's experience of casual applicants being unsuitable for apprenticeships would be readily explicable. Indeed, one of the firms that did have one casual recruit vowed never to do so again. Alpine Engineering had given a casual applicant a chance; but the lad had left after two months.

The medium-sized and larger firms were often quite amused that I should even ask the question. Why have recruitment procedures, employ training and personnel officers and do manpower planning exercises if you took on young people who tried to dodge all this? A few thought it simply unfair to those young people who had bothered to fill in application forms and go through the proper channels. For MGTS firms the situation was made easier as they could refer casual applicants to MGTS. They did not have to turn them down point blank. The applicant could walk through the factory gate with some hope. Most MGTS firms either gave their casual applicants Midland Group's address or simply told them to 'contact Midland Group'.

(iv) With Dad on Your Side

The employers were then asked how many times fathers and sons had called round at the firm together looking for apprenticeships 'in the last year'. Only 13 firms reported this; three group E firms, two group D firms, three group C, one group B and four group A firms. The three group E firms, (Transco, Casablanca Cars and Orion Products) had experienced it more than any of the others. It had occurred about 5-10 times at Orion, 10-12 at Transco and 10 at Casablanca Cars. Of the other firms, it had occurred 5-6 times at Bird Panels and 2-3 times at Altex Engineering. For all the other firms it had happened only once or twice. Thus, it was much less frequent than young people calling on their own.

One difference between fathers being with sons and young people calling on their own was that the larger firms were much clearer about whether the former had actually happened. Perhaps it was the case that fathers with sons were less likely to be intimidated by uniformed security guards at the gate than young people on their own. The answers were substantially more decisive on this question. Yet only two firms had taken on young people calling round with their fathers; A.R. Duff (Engineering) Ltd. (group A), and Zargon Engineering (group C). Hence, the father attempting to help his son along the way appeared to be wasting his time. The overall impact of fathers going with sons to knock on the doors of engineering firms was negligible.

(v) Conclusion: Doing it Their Way

The key point about this chapter is that the employers in the CEES were very loath to undermine their own recruitment procedures in the absence of incentives to do so (such as the case of taking on customers sons which would cement business relationships) or to please relatives, friends or key workers. Those calling 'on the off-chance' with no contractual, blood or friendship ties got short shrift. The employers wanted applicants to go through **their** channels; they wanted to control the recruitment process, to do things in their own time and according to their own rules and on their

own terms - not to be forced and rushed into decisions by young desperadoes.

The MGTS employers exemplified this tendency most clearly. A significant number of MGTS employers were quite willing to subvert the MGTS recruitment procedures; yet only **one** MGTS firm, (Summit Tools and Components), was willing to bend its own criteria and procedures for casual applicants. As we saw in Chapter Sixteen, Summit had already admitted to advertising for apprentices in the 'Coventry Evening Telegraph' and taking on young people as apprentices from young people already working at the firm. Thus, Summit was already subverting the MGTS recruitment procedures quite substantially without taking casual recruits into account. Summit did not see any of this as a problem. But this sort of thing was a problem for MGTS supervisors on the off-the-job training, when they had to cope with apprentices who had been taken on without reference to the MGTS's criteria and in a very ad hoc fashion. On the whole, MGTS firms were more much more likely to flout MGTS recruitment criteria and procedures than their own 'alternative' procedures, which were sacrosanct (with the exception of Summit).

Chapters Seventeen-Nineteen dealt largely with external threats to the autonomy of CEES apprentice recruiters - the MGTS, the Careers Service, youth labour market conditions, casual applicants. It was difficult to control the flow of applicants but MGTS, the Careers and casual applicants could be kept at bay or ignored to some extent. The next chapter looks at a potential internal threat to control over recruitment - the trade unions.

Chapter TwentyISSUES SURROUNDING THE CONTROL OF RECRUITMENT: TRADE UNIONS, RATE-FOR-AGE AND MANAGERIAL CONTROL(i) Introduction

This is the first of three chapters on ascriptive recruitment criteria. The focus here is on age. Chapter Twenty-one examines blood ties - how sons/relative of employers and employees gained preferment in recruitment. Chapter Twenty-two examines race and sex as ascriptive criteria which worked to the disadvantage of female and black applicants. But this chapter is not just about age as a recruitment criterion. Age becomes important mainly in relation to the rate-for-age payment system in apprenticeship and the overall power of trade unions in recruitment.

In this chapter it is shown that trade unions had little direct influence on the recruitment of apprentices; only four firms admitted to trade union involvement in the recruitment of apprentices. At three of these firms union representatives, qua union representatives, interviewed applicants for apprenticeship separately from management interviews. Managements at two of these firms argued that as the shop was heavily involved in training then it was justifiable that they had some say in which apprentices were taken on. At the third firm it was a matter of long-standing practice - and it was a practice that management were disgruntled about. Participation in the fourth firm involved consultation with the convenor on apprentice numbers. Against this lack of union participation in apprentice recruitment went the assumption amongst management that apprentice (indeed all) recruitment was and ought to be under the control of management. There was a coyness regarding talking about trade union participation in apprentice recruitment. Instead, they continually emphasised the good relationship that they had with union representatives. There was much 'window-dressing' (Wood:1988).

There were two areas where trade unions at the plant level had an important indirect influence on apprentice recruitment. First, patternmaking firms

were theoretically subject to a Coventry Patternmakers' Agreement which stipulated that there should be one apprentice to five craftsmen. There was considerable variation on the extent to which it was upheld. In the larger, older and highly unionised shops it was a real issue for management. They interpreted it as a nuisance which severely limited their ability to regulate apprentice numbers as they saw fit. It was a challenge to their control over apprentice recruitment. In smaller, especially the newer firms that had been set up within the last twenty years, and where union membership was low or non-existent the agreement was more or less ignored. In the small family firms, employing sons as apprentices and other relations as adult workers, it was a dead issue.

Secondly, rate-for-age payment resulting from national agreements which meant that apprentices were paid according to their age and not whether they were first, second, third or final year apprentices and that they went onto the skilled rate at 20 years old, was seen as a serious limitation on employers' rights. The commonest criticism was that rate-for-age mitigated against taking on older applicants with better qualifications as this would either be more expensive or involve negotiations on new rates for over-age apprentices. When training was 3½ years long and apprentices went onto the skilled rate at twenty employers felt constrained to recruit 16-year-olds. This was seen as a threat to employer control over apprentice recruitment. Negotiations with unions over payments for apprentices who were over twenty was a partial solution, but this depended on union goodwill and the general state of industrial relations within the firm.

Finally, an issue of control emerged on the questions on union involvement that was not catered for in the interview schedule; the interference of the EITB on how many apprentices were taken on. The larger firms in particular saw EITB strictures on apprentice numbers as a serious issue of control over apprentice recruitment, although when the factors that employers took into account in deciding are examined the EITB was only the equal tenth most important factor, mentioned by only three firms. The current workload, manpower planning and the general economic climate were by far the most

important factors in deciding how many apprentices to recruit.

(ii) Trade Unions and Managerial Control over Apprentice Recruitment

Interviewees were asked if there was any 'participation of trade union officials or shop stewards in the recruitment of apprentices in any way'. A general question was preferred so as to register any level of participation. Not much was registered at all. The employers were cagey about the question. There was one outright lie (from Tudor Panels) which was embarrassingly exposed during the interview. It seemed the employers were hiding a greater degree of union involvement than they would care to admit. This was based on nothing very concrete other than the hesitant, cautious and calculating manner in which many had approached the question and the Tudor Panels affair - to be explained below. The overriding concern for many seemed to be that I should come away with either the impression that industrial relations within the firm were harmonious or that managements' were exercising their 'right to manage' in the field of apprentice recruitment. At times both approaches were combined.

There were only four firms that admitted to trade union involvement in apprentice recruitment: Church (Patternmakers) (group A); Tudor Panels (group A); New Midland Sheet Metal Co. (group B); and United Industrial Fasteners (group D). It is worth examining the different cases in turn.

Church (Patternmakers)

The interviewee was very reluctant to admit that the shop steward was on the Works Committee which interview prospective applicants for apprenticeship. On the question of who was responsible for recruiting apprentices only the interviewee (Director), the Works Director and Technical Director were mentioned. Yet it later emerged that the shop steward was part of the Works Committee and participated in interviewing. This Committee had only been going for the two years preceding the CEES interview. Prior to that, the Director had interviewed all apprentices on his own. He was reluctant to say why the Works Committee was brought in, but added grudgingly:

'...I'm not sure that their methods, or the Committee methods are any better than when I interviewed them. We've had success and failures on both counts.'[Research Notes].

Initially, the Director said there was no participation of trade unions in apprentice recruitment, but then went on to add that:

'...the shop steward is on the Committee that interviews the prospective candidates.'[Research Notes].

Any attempts to get more information on the role of the shop steward and the Works Committee were frustrated by general comments about how well the current arrangements were working - itself a contradiction when set against earlier comments which raised doubts about its effectiveness.

Tudor Panels

It was similar at Tudor Panels. After initially saying that there was no union involvement in apprentice recruitment, the interviewee (again the Director), came round to admitting that prospective candidates for apprenticeship were interviewed by shop stewards separately from the main interviews with himself and the Works Manager. More explanation of the process was forthcoming as compared with Church.

The interviewee explained that both the Works Manager and the shop had to be satisfied that a candidate was good enough. Taking on apprentices was a joint decision. The shop, and their representatives the shop stewards, had to have a say in which lads were taken on as it was they:

'...who 'ave got to be responsible for partially trainin' them. Because we put them with the men, each in turn, so that they can see the various skills, or we can see whether they've developed any particular tendencies towards specialisation.'[Research Notes].

To induce the shop to take an interest in the training of apprentices they were given a say in recruitment. This had been going on for the last 8-9 years. A second inducement was that the men got the apprentice to help them whilst they were on piecework jobs. A good, interested lad, would, after the first six to nine months be quite useful in this respect. Apprentice recruitment, payment systems, industrial relations and training were welded together in a set of self-supporting relationships at Tudor Panels. Once the

Director had made the initial admission that 'participation' existed he seemed relatively willing to talk about it, and to view it positively.

New Midland Sheet Metal

The situation at New Midland was different. There the interviewee, the Works Director, was only too willing to talk about union involvement in recruitment. At New Midland the adult skilled sheet metalworkers were recruited through the sheet metal section of the AUEW's local offices in Coventry. Adult sheet metalworkers were impossible to 'get off the streets' or from the newspapers according to the Works Director. The tone of his voice suggested that he resented this situation. It smacked of resignation. The sheet metal shop was a closed shop area. Prospective candidates for apprenticeship were interviewed by the sheet metal foreman on behalf of the shop. This arrangement had been in place for at least twenty years according to the Works Director. It was a long-established practice.

United Industrial Fasteners

At United Industrial Fasteners there was no union involvement in the interviewing of apprentices but the Convenor was consulted about apprentice numbers. The interviewee (Personnel and Training Officer) emphasised that the Convenor was particularly interested in situations where apparently 'extra' apprentices were taken on. This usually occurred when there was two or three retirements in the toolroom and there was a lot of extra work. The Convenor was concerned that apprentices were taken on to fill the gap rather than adult craftsmen.

Explanations of why apprentices were taken on rather than craftsmen had to be given by the interviewee to 'reassure' the Convenor that the firm were not just doing this to save on wages. Arguments about the cost of training were put forward by management and the long-term plans for the extra apprentices.^[1] The level of participation was described by the interviewee as being 'informal'. It had been ongoing at the firm for about 10 years. The Personnel and Training Officer was quick to point out that the AUEW, through the Convenor, only applied informal pressure on numbers:

'They don't put any pressure on - no formal demands or anything. They

know really, that we're lookin' for about four to six. Unless there's a massive retirement, (in the toolroom, and obviously there shouldn't be if you've planned it right)...They ask me...the AUEW guy, the Convenor, (we've got a fairly good relationship), about how many apprentices we're havin'...and they know it's above the EITB regulations for the size of our firm, (way above)..so..' [Research Notes, employer's emphases].

There was no cause for concern, according to the interviewee. The firm was fulfilling its duties on training. All was fine.

The United Fasteners Personnel and Training Officer's aside about how good relations were with the Convenor was fairly typical of remarks made by other group C-D firms. Many C-D firms stressed harmoniousness, 'getting on well with each other' and 'union involvement' in training, (but **not** recruitment). At Arc Metals & Plastics, the interviewee was at great pains to stress that:

'...we have a very close, and er, ongoing relationship with our trade unions, both staff and works, and we have a pretty good relationship with them. [Research Notes].

There was a lot of this kind of vacuous reassurance of harmony in many group C-D firms. But for most A-B firms, a few C-D firms and the majority of group E firms, the interviewees tried to emphasise the point that recruitment of any workers, young or adult, was essentially a management function. The interviewee at Bird Panels explained that he:

'...would talk to them. [the unions:GR] But the responsibility is to our management.' [Research Notes].

And at Auto-Gears it was put over forcefully that:

'It's a case of, basically...it's our decision. (elevatin' myself into management)...They see it as a management decision, how many we take on...apprentices, which it is.' [Research Notes, employer's emphases].

However, Bird Panels and Auto-Gears had two different approaches after the decision had been made about the numbers to recruit. At Bird, the interviewee stressed that after the decision about numbers had been made it would not be changed by anything the unions said, but he always tried to get their 'participation' after the decision had been made. In effect, Bird were always trying to get union endorsement of a management decision on numbers; agreement on a policy they had no say in. The unions had to be talked round

into being 'co-operative' about decisions on apprentice numbers as:

'...it's very obvious that you can't run a craft trade without the men in the shop participating in 'ow the apprentices are recruited. You try an' get their co-operation, an' by and large you generally 'ave it. I can always tell the shop steward about apprentice recruitment, an' we discuss it an' they 'elp yer.. When we've decided, when I've took 'em on, then I'll tell them. I've always told them in the past that we're doin' our bit to keep this particular craft trade goin'.' [Research Notes, employer's emphasis].

This sham participation had no place at Auto-Gears. The unions were informed but there was no charade of trying to lead them into thinking real participation in apprentice recruitment was taking place. There was a 'take it or leave it' approach; decisions on apprentices were received as information at Auto-Gears. Managements' 'right' to recruit apprentices how they saw fit was smoke-screened at Bird. These two examples were chosen as typifying different managerial strategies on attaining union involvement in training whilst denying them any real involvement in the recruitment of apprentices. The issue was not pursued to the extent that a numerical value could be placed on the proportion of firms using each strategy; it was something that arose from the qualitative data.

The above considerations raise the point as to why unions would want to participate in the recruitment of apprentices and the more general issue of why unions should get involved in conventionally management functions. In order to begin to answer these questions it is necessary to advance an overall perspective on unions. Hyman and Elger (1981) have argued that:

'The defining characteristic of trade unionism is a challenge to the subordination of labour to capital, an attempt to limit, modify or displace aspects of capital's direction of labour.' (p.115).

From this perspective, the critical question becomes to what extent participation in interviewing apprentices, marking tests, assessing school reports and being involved in the final decision to recruit particular applicants constitutes a real challenge to capital. On the one hand it would open up the possibility of challenging employers on their anarchic recruitment policies, of going for employees sons, not recruiting females or blacks - no matter how suitable - and placing the sons of directors and top

managers in apprenticeships. Challenging these practices would constitute a real challenge to capital. However, on the first point - giving apprenticeships to employees sons - the unions would be compromised and have difficulty justifying to their members why family firm policies had to come to a stop. Given the racism and sexism inherent in British engineering culture, any attempt to force managements to adopt real equal opportunities policies may also face resistance from both management and other trade unionists. Of course, this assumes that having trade unionists on recruitment committees as advocated by some managers (Singer and MacDonald:1970) and trade unionists in engineering (Morgan:1971) is synonymous with fighting for the rights of female and black applicants at the point of recruitment, but in the four firms above not one of the 28 apprentices in these firms were either female or black. Thus one can conclude that the unions' participation in recruitment was not in fact leading to any kind of equal opportunities scenario in these four firms in terms of concrete results. The evidence suggests that they were acquiescing to, maybe even actively supporting, the reactionary policies on recruitment in these firms. No challenge there. Neither were they challenging the family firm policies which will be examined in the next chapter. Indeed, United Industrial Fasteners had the third highest number of apprentices who were sons of employees, and the fourth highest proportion, of CEES firms; whilst we saw earlier that New Midland was willing to subvert the MGTS procedure and take on test failures if applicants were employees sons. Church (Patternmakers) were proud of their family firm tradition and two out of their three apprentices were employees' sons. Tudor Panels were less family oriented. Altogether, in New Midland, Tudor Panels and Church, three out of their eleven apprentices were employees sons, and in all four firms, twelve out of 28 (43%) were employees sons. This figure was much higher than the proportion for the total CEES sample (7%). So much for challenging capital here; indeed, trade unions seemed to be supporting family firm traditions. Challenging the family firm tradition would be saying to fellow members that their sons would get no special treatment in apprentice recruitment. But skilled men saw this as one of the privileges of their position and such a

union policy may well prove unpopular amongst the general membership whose sons were denied preferment. On the last point, challenging management on handing out apprenticeships to the sons on top managers and directors, none of the CEES data really touched on it. However, it was unlikely as it appeared in the four examples that unions were allowed into the inner sanctum of the recruitment process only if they were either ineffective or non-effective in challenging management recruitment policies, or better still actively collaborating in these policies.

In general then, the evidence and argument supports the view that the few unions who did participate in apprentice recruitment did so for reactionary reasons, and helped to preserve not challenge discriminatory recruitment practices. It was part of incorporation (Hyman:1975) into management recruitment strategies. It can be argued that if unions did successfully challenge managements on the non-employment of females and blacks as apprentices, the family firm tradition and taking on managers sons as apprentices, then such participation would soon end, its disadvantages outweighing its usefulness for management, and shop stewards would be thrown off recruitment committees and panels.

On the other hand, participating in the recruitment of apprentices may well have consequences for young peoples' attitudes to trade unions. Cohen (1983) has argued that trade unions are mainly concerned with protecting adult members and that the needs of youth get a low priority. But if young people were being rejected by trade union representatives as well as management in recruitment this may lead to a deepening of distrust and dislike against trade unions in general. A wider objection is that collaborating with managements in hiring workers blurs the class line and implicates workers and their organisations in decisions which discriminate in general against fellow workers or potential workers. It labels unsuccessful applicants as unsuitable. Trade unions are basically about defending workers rights, living standards and working conditions and through doing so providing a real challenge to capital - unconditionally - not sorting those out who are deemed worth defending and nurturing as union members and workers. From a trade union perspective there is nothing to gain by sitting on recruitment

panels as the aims of equal opportunities and the challenge to reactionary and discriminatory recruitment practices can be pursued without being implicated and becoming collaborators and accomplices to these practices and policies. There was no real reason to expect trade union members to help recruit apprentices. There was nothing to be gained on fundamental trade union principles to helping management recruit apprentices, but as private individuals there were gains; sons got employed.

If there was nothing much to be gained from a trade union perspective what was in it for the few firms that did it? As has been argued, managements on the whole protected their 'right to recruit' with gusto, arguing that it was one of their prerogatives. Liepmann (1960, pp147-157) gives a useful historical summary of the engineering union's acknowledgement of the employers' rights to recruit, train and employ workers in general and young workers in particular, showing the establishment of these rights in the late nineteenth and early twentieth centuries. But in training apprentices, especially in firms with a high on-the-job training element, and where the shopfloor took on a substantial role in training, managements had a problem of getting sufficient co-operation, especially in piecework situations where craftsmen involved in training apprentices may feel that training might mean lost earnings. There were typically means of compensating craftsmen, (usually on an average earnings basis) when they went off production work to directly supervise apprentices. The apprentices also helped them with the skivvying aspects on production work in their early years which helped to reconcile craftsmen to apprentice training. But a few firms thought it necessary to go further and incorporate the shopfloor and trade union organisation more fully into apprentice training through giving them a say in recruitment. This was seen most clearly in the case of Tudor Panels, where to get the co-operation of the skilled men in training, participation in recruitment was yielded by management. Apprentice recruitment was a joint decision. As Gray (1988) notes, the content of training is an arena of class struggle, and at the plant level the ITB system, and especially the EITB the module system of training, gave workers a degree of influence and power in the labour process (Fairley:1982). In working through the skills that

constituted each module the support and co-operation of the craftsmen who played a part in passing on these skills and sometimes supervising module training, especially in the smaller firms, was essential. Thus, a few firms pursued the strategy of incorporating the craftsmen into the recruitment process to cement their wider incorporation into the development of apprentices' labour power within the labour process. It was a risky strategy as shop stewards involved in recruitment might challenge features of management recruitment policy. But if this happened the exercises in collaborative recruitment could simply be abandoned. Unions were allowed into recruitment on management terms and to aid management goals, to ensure the efficient and smooth development of skilled labour power. In the four examples above the challenge to the discriminatory and anarchic labour power policies of management appeared to be missing. Collaboration was welcomed.

(iii) EITB Interference and Other Factors Affecting Numbers Recruited

There were two other issues concerning the control of recruitment which surfaced in the questions on union involvement in apprentice recruitment. Both related to apprentice numbers. First, a number of, mainly D-E firms, pointed out how the EITB 'interfered' in how many apprentices they had to take on to gain exemption from EITB levies. On the whole, more resentment against EITB interference was evident than diatribes against trade union demands regarding participation in apprentice recruitment. The latter seemed to 'know their place' for the most part, and kept well out of apprentice recruitment. As Greengate Cycle Products put it; 'They don't want to get involved.' [Research Notes]. The EITB, it seemed, did want to get involved.

Imperial Carriers explained how:

'...You're always under pressure to recruit more from outside, i.e. the EITB people are always chuckin' out suggestions back an' sayin': 'get another one in, do this or do that.' Er,..there's a rule...(I don't know how the formula's worked), that there's so many craft people to so many apprentices. So, if I say...er...I know that two years ago I recruited six. One didn't turn up. And I thought: 'Oh, forget it!' (You know). And I had the EITB on to me like a shot and said: 'Not only will you get another one in, you'll get another two in. We've been a bit lenient on you on that one!'. ..[Laughs]...'[Research Notes].

Table 20.1 : FACTORS TAKEN INTO ACCOUNT IN DECIDING HOW MANY APPRENTICES TO RECRUIT - THOSE FACTORS MENTIONED MORE THAN THREE TIMES

FACTORS TAKEN INTO ACCOUNT IN DECIDING NUMBER OF APPRENTICES TAKEN ON EACH YEAR	No. of times factor was mentioned	% of firms referring to it (n=107)
1. Workload	37	35
2. Manpower Plan (Retirements/Turnover/Age)	36	34
3. General Economic Climate	21	20
4. Amount of Supervision available/Supervision time	10	9
5. Business/Development/Sales Plan	10	9
6. Trade Union Agreements on craftsmen/apps. ratios	8	7
7. Training Costs	7	7
8. Retirements/Age of Skilled men	7	7
9. Convention/Traditionally take on certain number	7	7
10 EITB recommendations	6	6
11 Changes in Technology, new technology (CNC)	6	6
12 Difficulty in recruiting/replacing skilled men	5	5
13 General Prospects for Future/Expansion Prospects	4	4
14 Size of Toolroom/Section/Firm	4	4
15 Labour Turnover	4	4

The unions were relatively acquiescent on apprentice numbers; they were too busy fighting redundancies and coping with short-time in the conditions of the recession, according to Wingfield Transmissions. The EITB, however, were as persistent as ever, despite rumours that the Tory Government were going to abolish them. In the grand scale of things however, the EITB did not figure heavily in dictating how many apprentices were taken on.

CEES employers were asked what factors they took into account in deciding how many apprentices to take on each year. Altogether, 37 factors were mentioned and there were 205 references to these factors. Table 20.1 shows those factors mentioned more than three times. Three factors stand out in particular; workload, manpower planning and the economic climate. The first concerned current workload, and small group A-B firms in particular noted it. In these firms, on-the-job training and intermingling production and completion of EITB modules at a relatively early stage in the apprenticeship was more to the fore than in the larger firms where off-the-job training took place. Apprentices were expected to make a fairly swift transition to doing production work in small firms with on-the-job training. These firms

were not looking to their production needs in four years time when apprentices came out of their time. Ryrle's (1976) research also showed that apprentices were recruited with current production and workload in view more commonly than future workload. Ryrle also argued that employers' use of apprentices on production work early on in the apprenticeship was one of the reasons they were keen on traditional apprenticeships. Manpower planning was mentioned more commonly by group C-E firms with training and personnel staff. Retirements and labour turnover were the two main constituents of these plans. The aim was to try to ensure that apprentices coming out of their time replaced those who left or retired without any skill gaps emerging. The third most important factor, the general economic climate, was probably more to the fore than usual in the economic circumstances of the recession of the early 1980s, which was in full swing when the CEES was being conducted. CEES employers were working within a hostile economic environment shrouded in the continual flow of gloomy economic statistics and forecasts, redundancies, closures and crisis headlines in the local press.

The EITB did not figure prominently; only six firms mentioned it as a factor they took into account in deciding how many to recruit. Only two firms took MGTS recommendations into account. One of these, Angle (Cutting Tools), complained about MGTS 'pestering' them to recruit extra apprentices. The Careers Service did not figure at all. Of the three organisations, (EITB, MGTS, Careers), the EITB was more commonly taken into account in recruitment decisions on numbers. Certainly complaints of excessive EITB interference drawn from the qualitative data must be put into perspective; the EITB was not a major consideration in terms of numbers taken on.

(iv) The Patternmakers' Apprentice Agreement

The second issue which surfaced on the question of union participation in apprentice recruitment was of concern to patternmaking firms. For Coventry patternmaking firms there was an additional trade union pressure on apprentice recruitment; the Coventry Apprentice Patternmakers Agreement. CEES firms were vague on the origins of this local agreement with the

Association of Patternmakers and Allied Craftsmen (APAC) - especially how long it had been in force. The essential point, on which all agreed, was that patternmaking shops in Coventry should have one apprentice for every five craftsmen. Where union organisation was poor or non-existent, the agreement was ignored. This was typically the case either in firms run by relatively young self-made men who had started up their own shops in the last 10-12 years or in small family concerns. Managements in the larger and older pattern shops, where union organisation was more entrenched were forced into taking the agreement seriously.

From the union's perspective the aim was to ensure a controlled supply of youth entering the trade. The patternmaking employers saw it as an anachronistic nuisance, particularly in times of recession when the workforce numbers tended to fluctuate. Church (Patternmakers) believed the agreement was unfair as it penalised the union shops; the cost of training apprentices fell disproportionately on them. Non-union shops did not have to train at all. Trinity Patterns argued that the agreement was restrictive as in periods when the firm was busy they would rather have a ratio of about three rather than five to one. But this sort of response would seem to be exactly the sort of practice the agreement aimed to outlaw.

Others pointed out that in the recession-hit Coventry of the early 1980s the agreement could not really work well even if managements were not hostile to it. Vortex Patterns gave the best example to illustrate this point:

'...When we set on the actual three apprentices we had fifteen men. Since then we've had to get rid of the majority of the men - we're down ta five,..we didn't think it fair to get rid of the apprentices so we kept 'em on. It's not bein' fair in my mind - well, next week we might set the ten back on again!...[The] the poor apprentices - just come in a couple of days, an' that's it.'[Research Notes, employer's emphasis].

The five to one ratio was seen as inflexible and unworkable in conditions of redundancies, short-time working and lack of work. Diamond (Patternmakers) had experienced similar problems. At the time of interviewing the firm they were 'over the top' on apprentice numbers but '...with negotiations with the union we can sort that out.'[Research Notes].

This example shows that the agreement still had force in conditions that were unfavourable to its operation and where employee numbers fluctuated; the key was the strength of union organisation. Indeed, six patternmaking firms said that they took the agreement into account in deciding the numbers of apprentices to take on. In addition, two sheet metalworking firms said that they took agreements with the National Union of Sheet Metal Workers & Heating Engineers into account which stipulated a ratio of eight craftsmen to one apprentice up to 1979 when the union agreed locally to relax the ratios (CBI:1979), due to perceived skill shortages in the trade.

In general, (with the exceptions noted above), there appeared to be little trade union involvement in apprentice recruitment. Managements had overwhelming control in this area. Many employers in the CEES generally saw it as their 'right' to decide how many and what types of apprentices should be taken on. In the qualitative data there was more concern over external interference, (mainly from the EITB, but a few MGTS firms complained about Midland Group 'pestering' them to take on more apprentices), than internal union pressures regarding apprentice recruitment. It was incursions of the EITB rather than organised labour into recruitment policies that appeared to be a major bone of contention. Union involvement in apprentice recruitment was not generally an issue of control - except on the point of rate-for-age payments. This issue did not surface in the direct questions on union involvement but was mentioned in relation to the age at which apprentices were recruited. The following section examines the ways in which the CEES employers saw rate-for-age payments as an area where unions had real clout in apprentice recruitment.

(v) Age of Apprentice Recruits and the Rate-for-Age System

The previous section examined trade union involvement in recruitment at the level of the enterprise. But there was one area where trade unions exerted some influence on the overall recruitment policies of firms: the age at which apprentices were recruited. Under National Agreements apprentices were paid at rate-for-age. Thus, to start on a lad at 17 would be more expensive

than starting another at 16. Not only would the first lad receive the 17-year-old rate for doing the same as a sixteen year old, but he would start on the skilled rate before he had finished his apprenticeship. Employers were reluctant to pay the full rate before apprentices came out of their time in order to recoup some of the cost of training (Lee:1979). There were ways round these problems however, as we shall see. Liepmann (1960) has argued that trade unions did not have much direct control over the recruitment process for apprenticeships, but they did play a crucial role in setting the framework within which apprentices were recruited in relation to the age of recruitment, duration of the apprenticeship and the dilution of engineering skill. This seems a fair assessment twenty years later.

First, let us look at the age at which the CEES firms recruited apprentices. The majority (79%) of firms recruited 16-year-olds. All the large group E firms recruited 16-year-olds only. Two firms, (Power Engineering Co. and Zargon Engineering) recruited apprentices no older than 16½. Casablanca Cars explained why 16 was the norm:

E 'Because we have to put them on a full rate at twenty, and they have to do a minimum of three-and-a-half years training. So that's a union pressure that's on us..something that the training department isn't too happy about, 'cos it restricts us.

G In what circumstances would they put pressure on you?

E Well, it's industrial relations. They're saying that apprenticeships are for school leavers. Now, if we had somebody,..we've got no systems for, say..now someone who's failed 'A' levels. Y'know, mucked 'is 'A' levels up. There's nothing we can do for him as a company. Now we can't even bring him in as a technician - he's too old. He's over twenty-one by the time he's finished his apprenticeship, or he'll only get a two-year training. So it's a restrictive factor on that.' [Research Notes, employer's emphases].

Casablanca summarised the problems of taking on older apprentices. The rate-for-age system of payment was seen as the basic problem. Commentators such as Perry (1976) also castigated its 'rigidity'(p.93). Union support of this system was seen as restrictive and the consequences could be problematic. Either the firm could be forced by union pressure into paying an over-age apprentice the skilled rate or his apprenticeship would have to be ended prematurely and he would not complete the EITB minimum of 3½ years training.

S.D. Machine Tools pointed to another problem with over-age apprentices. The interviewee argued that:

'...we start running into union problems. The recommendation is, (as you will know), that they should be sixteen-plus, and should end at the age of twenty. The moment you start taking them on any older you have problems with pay-for-age: one looks sideways at another and says: 'Why is he getting eight pounds a week more than me and he's doing the same work?' [Research Notes].

Bringing in over-age apprentices could cause labour unrest. The 16-year-old might lose interest because he felt he was being unfairly treated compared to the 17-year-old working next to him. This could cause a loss of morale, or worse, complaints to the union or arguments with supervisors. However, as argued in Chapter Three, part of the attraction of apprenticeships for employers is that after the first 1/2 years, depending on the quality, intensity and breadth of training and the quality of the apprentice, they have a labour power developed to the point where it can make a contribution to production. As a number of researchers have noted (Lee:1979; More:1982; Goldstein:1984) cutting the length of apprenticeship was not in employers' interests. Neither, given rate-for-age, was it in their interests to take on older applicants, as they got more productive time on relatively low apprentice wages from a 16 than a 17-year-old in the rate-for-age system. Employers were likely to take on a 16-year-old to gain the maximum time where apprentices did productive work on low wages. Of course, this applied only where the rate-for-age was rigidly adhered to and union strength enters here. It was not surprising that in the highly unionised group E firms 16-year-old only recruitment was the case in all firms, for craft and technicians. Only 13% of CEES firms took on 16/17-year-olds as apprentices. Even less took on 16/18-year-olds (3%), 16/19-year-olds (2%) and only one group A firm took on 17/18-year-olds. Facts such as these led Ashton, Maguire and Spilsbury (1987) to conclude that:

'The combined effect of management-union agreements on apprenticeship training and age related payment systems has been to restrict the age of entry to many apprenticeships to 16-year-olds.' (p.165).

Thus, 16 year old recruitment was the clear norm, a norm that the MSC has argued is restrictive and rigid, and must be broken (Manpower Services

Commission:1981a). Yet over-age apprentices were taken on. There were methods of getting round the problems, as the next section shows.

(vi) Getting Round Rate-for-Age

Despite the problems over-age apprentices were taken on. The practice seemed to have little to do with whether a firm was Federated (and hence bound to the National Agreements on rate-for-age). Examination of the base data for the previous section showed that 83% of the Federated firms (those who were members of the EEF) took on apprentices that were no older than 16 yet 78% of Non-Federated firms took on apprentices no older than 16. But there were differences at the extremes; of the six firms that took on apprentices aged 16-18, 16-19 or 17-18, only one (Atkinson Engineering) was a Federated firm.

The firms were also asked if they had taken on any apprentices who were 'at least a year older than normal in the last two years'. Of course, it should be remembered that what was 'normal' varied here, but in all, 22 firms (21%) said they had done it. The practice was not uncommon. Most had only taken on one that was 'older than normal', but three firms, (Redland Sheet Metal, Altex Engineering and V. Broughton (Machine Tools) Ltd.) had taken on two and Minex Communications three. Why had they done it, and how had they got round the problems of rate-for-age?

Most apprentices recruited 'one year older than normal' were technicians. It was felt that technician apprentices were required to be more mature than craft lads as they were given more responsibility and were not under such close supervision. Firms such as Atkinson Engineering took on older people for technician apprenticeships if they had difficulties in finding suitable young people with the qualifications to get onto the TEC level II in the important subjects such as maths and physics:

'As I say, if you want the qualifications...we don't really mind,..[taking on older apprentices:GR]..but we still prefer the qualifications to somebody at 16 with no qualifications.'[Research Notes].

Atkinson were rare in putting qualifications above age. Larger group D-E

firms sometimes took on 17-year-olds as technicians at the end of the recruitment programme to fill in gaps left by withdrawals due to young people taking up other offers. Finally, three firms said that they looked out for 'A' level people "in a bid to attract the 'brighter lad'" but according to one of them, Auto-Rak Machine Tools, this was difficult as teachers were keen on getting 'A' level pupils to university. As we saw earlier, CCS statistics showed that few sixth form leavers considered engineering as a career. Furthermore, quite correctly, most would probably believe they were too old for apprenticeships.

Firms looked for 17+year-old apprentices for a number of reasons and there were ways of getting round the rate-for-age problems associated with taking them on. The commonest way was for the firm to negotiate a separate rate, somewhere between the final year apprentice rate and the skilled rate, with the relevant union. Carbitool for example, talking about one lad that they had recruited who was seventeen, noted that:

'...There were problems, with the wages. Not serious problems, because as he was such a hard-workin' lad we negotiated a separate set of rates for this particular lad.' [Research Notes].

There were new rates for each year of his training. Another solution was to put the 17 or 18-year-old on 17 and 18-year-old rates and then negotiate new rates for the last one or two years of training. Atkinson Engineering (Designs) favoured this solution, but there were problems with it:

'One of the big drawbacks with apprentice rates at the moment is that usually, we want them to have 'O' levels at least, possibly 'A' levels, so once you start talking about 'A' levels you're talking about 18 when they leave school.. In this case, two of the apprentices were 18 when they left school. So it means that you're having to pay very high rates, because it's rate for age..So it's an inflated rate for age at 18 even though basically they're still a first year apprentice.' [Research Notes, employer's emphases].

It seems that Atkinson (and they were not alone at hinting this) wanted 17+year-olds on the wages of a 16-year-old. But Atkinson were keen on getting technicians with good qualifications and were willing to pay 'inflated' rates. Another, costly, solution was to put the apprentice on the skilled rate before his apprenticeship had finished. This was rare, and

dependent on how long the apprentice had to go to finish his apprenticeship. The rate-for-age problems associated with taking on older apprentices were not insurmountable. Either a whole set of new rates or new rates for any additional time on the apprenticeship could be negotiated. How successfully, (from a management perspective) these rates could be negotiated depended on union flexibility, and how far the unions were willing to go on special rates for over-age apprentices could depend on a myriad of factors affecting the state of industrial relations at any firm at any given point. The practice carried a certain risk from a management point of view. There were also the general disadvantages which were noted above. The risks to industrial relations involved in negotiating separate rates and these general disadvantages explained why only about 2% of first and second year CEES apprentices were recruited 'at least one year older than normal'.

CEES employers did not see the rate-for-age system of payment as being a solid restriction on their control over the recruitment process. There were ways round the problems thrown up by it, but they depended on union co-operation. It was a nuisance more than a restriction, carrying the potential risk of leading to industrial relations problems or exacerbating an already poor industrial relations situation, and therefore it caused resentment amongst employers, especially those keen to take on older applicants with better qualifications for technician apprenticeships. If industrial relations was going through a sticky patch then union co-operation might not be forthcoming or difficult to attain. Overall, there was a real issue of control over apprentice recruitment in relation to the age of recruits. This issue is best studied by examining actual rate-for-age conflicts within specific firms. The CEES did not do this.

(vii) Discussion: Internal and External Threats to Employer Autonomy

On the surface, the employers involved in the recruitment of engineering apprentices seemed to have considerable control over the recruitment process relative to trade unions. However, the fact that only four firms admitted to union participation in recruitment and only in three firms did union

representatives (qua union representatives) actually get to interview apprentices, understates the overall impact of trade unions on the recruitment of engineering apprentices. The rate-for-age system of payment for apprentices resulting from National Agreements made between the EEF and the CSEU was seen as a problem by many employers. It was seen as having restrictive consequences as to the type of apprentices taken on. The 'over-age' 17 or 18-year-old with good qualifications was more expensive to employ than the 16-year-old. Furthermore, in some firms the trade unions had negotiated rates of pay well above those specified in the latest pay agreement (the Federated rates). From an employers' perspective this exacerbated an already difficult situation. The rate-for-age system was seen as an attack on their freedom to recruit the best apprentices. It threatened their control over the recruitment process and unduly affected their recruitment criteria. The recruitment of over-age apprentices in some firms was dependent on the employers being able to negotiate separate rates for over-age recruits. The Coventry Patternmakers Agreement was an important influence on apprentice numbers in some patternmaking firms. Trade unions had a greater impact on apprentice recruitment than their lack of formal participation in recruitment suggests.

In terms of external threats to employer autonomy in recruitment, top of the list must come the EITB. A few of the larger firms thought the EITB quite dictatorial in their pronouncements on apprentice numbers. Control of apprentice recruitment regarding numbers appeared to have been substantially ceded to an interfering external agency. Comparing the three organisations (EITB, MGTS and Careers), in terms of their impact on the control of the recruitment process by the firm, the following conclusion would seem apt: the EITB was seen as the most powerful in terms of undermining employer control over apprentice recruitment. The EITB was looking to the industry as a whole; the firms were looking to their own labour power and labour process strategies. In times of recession and redundancy, such as when the CEES was undertaken, the numbers taken on were being revised downwards. The EITB had their eye on the next upturn in the economy and attempting to avert skill shortages; many of the CEES firms were concerned with keeping costs down

including training costs and some were just trying to survive. There were examples of CEES firms not surviving long after 1980/81 following take-overs and rationalisations. In these conditions, EITB strictures on apprentice numbers were viewed as oppressive and a serious blow to employer control over recruitment, yet this was largely on the quantity aspect. Of course, the EITB played a crucial role in determining the overall quality of apprentices through its interventions in engineering apprentice training, but in terms of recruitment the main emphasis was on quantity. However, in terms of the factors employers took into account in deciding how many apprentices to take on the EITB did not figure prominently; workload, manpower planning considerations and the general economic climate were much more important. The qualitative data overestimates the EITB's impact.

The MGTS and Careers Service on the other hand appeared to have made little impact on the numbers recruited. The former, as an arm of the EITB, and working for the local engineering industry as a whole in the sense that it was attempting to train to certain standards, was involved in maintaining the quality of recruits, as well as being involved in the quality of training once apprentices had been recruited. As we have seen, the MGTS failed to maintain the quality of recruits (although the actual training at its Parkside Off-the-Job Training Centre had a high standing in the local community) because of the contradictions within its relationship with member firms. It attempted to recruit apprentices to certain standards through its own procedures, but with the firm having the ultimate say as to which applicant (out of those coming through the MGTS recruitment procedures) was taken on and recruiting outside MGTS channels in some cases. Where firms defined their criteria differently to those of the MGTS then the firms' criteria prevailed. The MGTS gave way, its standards undermined, the firm in ultimate control.

As we saw in Chapter Sixteen, MGTS firms were willing to undermine these standards for other wider ends or their own alternative set of criteria. The final two chapters of Part Four illustrate the ultimate anarchy of the recruitment process in the hands of employers. Young people were sometimes recruited not on the basis of their potential as labour power to be

developed, but on blood ties, gender and race. Criteria were set aside for the sons of top managers and employees in some firms, whilst for young females and blacks the criteria were set as absolutes ('they never pass the tests') where for white males they were relative, or the criteria never came into play and blacks and females were not recruited whatever their work attitudes or qualifications. These two chapters, with Chapter Sixteen, set all the employers' moans about poor quality youth, low educational standards and poor work attitudes in a clearer light. Blood ties, race and sex criteria prevailed over careful specification of attributes sought in applicants. These ascriptive criteria, along with age, did not figure at all in the statements of attributes sought in applicants analysed in Part Two. But they figured as underlying, often hidden or disguised (race and sex), recruitment criteria which threw the recruitment process into a state of anarchy where attributes sought in applicants and labour power attributes were partially set aside or totally ignored in favour of discrimination on ascriptive, prejudicial and commercial grounds. The ability of employers to do this rested on their degree of control over recruitment and ultimately their social power to recruit, socially produce, to fire and refuse to employ labour power.

Age was slightly different. It did not feature as a natural ascriptive criterion like sex but attained a certain forced social artificiality as the rate-for-age system imposed cost benefits on 16-year-old recruitment. Age, as a recruitment criterion, was filtered through the rate-for-age system. There were cost pressures to recruit 16-year-olds. No doubt if the rate-for-age system was scrapped in favour of rate-for-year of apprenticeship the proportion of firms taking on 16-year-olds only as apprentices would decline, although to what extent depends on speculation. The next chapter looks at the second ascriptive criterion - blood ties.

Chapter Twenty-oneISSUES SURROUNDING THE CONTROL OF RECRUITMENT: KEEPING IT IN THE FAMILY -
TAKING ON EMPLOYEES' RELATIVES AS APPRENTICES(i) Introduction

As Chapter Sixteen showed, certain MGTS firms were flouting MGTS recruitment procedures in favour of recruiting from the sons of employees, relatives and clients. This chapter develops these findings specifically in relation to the recruitment of employees' relatives as apprentices. The Chapter Sixteen data pertained to MGTS firms only; this chapter looks at the level of recruitment of employees' relatives amongst the entire CEES sample. It also attempts to come to some view, using the qualitative data, about the extent to which various firms subverted their own recruitment procedure in taking on the relatives of employees as apprentices.

A number of commentators and researchers have pointed to the preferment given to employees' relatives, especially sons, in apprentice recruitment. The Clerk Report (1931) noted that 'in all districts'(p.6) it was common for engineering employers to give preference to the sons or relatives of employees. The practice was still common in the 1950s according to Liepmann (1960) who pointed to the nepotism rife in apprentice recruitment. Gleeson (1986) notes that in the recession of the early 1980s it helped considerably if a young person lived in a family with the right occupational connections. Goldstein (1984) has argued that the sons and nephews of craftsmen have always been in a good position to get into apprenticeships. They were given preferment and they were more likely to know about apprenticeships through word of mouth channels. The CEES shows that young people whose fathers were employed by CEES firms were at an advantage when it came to getting into those firms as apprentices. It appears management gave preferment to employees' sons with wider issues of control in view. It was about being able to hand out certain 'favours' or perks to employees (especially skilled workers) to help maintain an acquiescent workforce. There was some genuine concern about the fate of sons of employees who were looking for

jobs - this cannot be denied. But labour discipline was to the fore. On this issue the employers gave up a degree of control of the recruitment process, in relation to the attributes sought in applicants, with the aim of attaining wider control through seeming to be a 'caring employer' with workers' interests at heart and keeping key workers in moral debt. Labour power strategies were downgraded in favour of wider control strategies.

The phenomenon of owners and top managers taking on their own sons as apprentices is also uncovered here. It is argued that the main reason owners and managers did this was to shelter their own offspring against the harsh winds of youth unemployment, and labour power strategies were disregarded to an even greater degree, introducing a degree of anarchy into the recruitment process, with the ditching of attributes sought in applicants for blood ties. The ability of top managers to get away with this varied. Where there were professional trainers and personnel staff they faced resistance. In firms where directors and top managers did all apprentice recruitment themselves their social power was greater and their offspring could be taken on regardless of the attributes sought in applicants not carrying their genes.

Section (iv) examines the explanations in the literature for the importance of recruitment through employee channels and taking on their relatives and friends. Substantial headway has been made on this issue recently through the work of Hohn (1988), Windolf (1988c), Windolf and Wood (1988a), Wood and Manwaring (1988) and Wood (1988). This work relates primarily to the recruitment of adult workers but it has application for youth recruitment. The final section argues that there is an affinity between closed or restricted recruitment channels and giving preferment to employees' relatives and friends.

(ii) Keeping it in Employees' Families

CEES employers were asked to estimate what proportion of their apprentices had relatives working for the firm. Nearly a half (49%) had no apprentices who were employees' relatives. Exactly a fifth had between 1-25%, nine per

cent between 26-50%, four per cent 51-75%, none between 76-99% and at seven per cent of firms all apprentices were relatives of employees. This last group were all small group A-B firms. In addition, twelve per cent could not even estimate what proportion of apprentices were employees' relatives or they had no apprentices at the time of interview.

The results were obviously affected by the size of firm. In the larger firms with hundreds or thousands of employees and up to 479 apprentices (in Minex Communications) it would perhaps be surprising if there were not any relatives of any apprentices within the firm. We saw earlier that it was common in the larger firms to put up notices in the factory; relatives of workers in these firms were in a better position to be informed of developments in apprentice recruitment as compared with young people having no relatives employed there. All of the D-E firms who answered the question about the percentage of apprentices having relatives in the firm said they had some. However, nearly a half of all D-E firms felt unable even to give an estimate. All the firms that said all their apprentices had relatives in the firm were group A/B firms. And all of these, except Day and Hayward (who had three apprentices) had only one apprentice. The largest numbers of apprentices with relatives in the firm at particular firms were recorded at:

<u>Firm</u>	<u>SIZE</u> <u>(Group)</u>	<u>NUMBER OF APPRENTICES</u> <u>with Relatives at the</u> <u>Firm</u>
V. Broughton (Machine Tools)	E	*30
Conquest International	E	*17-23
United Industrial Fasteners	D	9
Orion Products Ltd.	E	*8
S.D.Machine Tools Ltd	D	6
Carbitool Ltd.	D	4
Atlantic Jig & Tool Co. Ltd.	B	3
Harvey and Brinton Ltd.	C	3
H. Smith (Tools) Ltd.	C	3
Day and Hayward (Sheet Metal)	A	3

*Numbers derived from percentage given by the interviewee. Most interviewees gave me actual numbers rather than the percentage asked for.

The largest recruiter of apprentices with relatives was V. Broughton (Machine Tools) who had about thirty of them. Conquest International had

between 17 and 23, and only Orion Products , United Industrial Fasteners and S.D. Machine Tools of the other firms had more than 5. Of course, some of the firms that had only one or two might still have a high percentage if they only had three or four apprentices. The information below gives the highest percentages of apprentices with relatives within the firm, for firms with three or more apprentices:

<u>FIRM</u>	<u>SIZE</u> <u>(Group)</u>	<u>%age OF APPRENTICES</u> <u>WITH RELATIVES AT THE</u> <u>THE FIRM (various firms)</u>
Day and Hayward (Sheet Metal)	A	100
Parkinson Bros.	C	66
V. Broughton (Machine Tools)	E	60
United Industrial Fasteners	D	53
Conquest International	E	30-40
Arc Metals and Plastics Ltd.	C	33
Atlantic Jig & Tool Co. Ltd.	B	27
Talcott Metals Co. Ltd.	C	25
Harvey and Brinton Ltd	C	25
Amazon Engineering Ltd.	B	20
D-Gear and Equipment Ltd.	B	20
Orbit Engineering Ltd.	C	20
H.Smith (Tools) Ltd.	C	20
Carbitool Ltd.	C	20

Most of them were C-B firms. If 'heavy' recruiters of apprentices having relatives at their firms are defined as firms where five or more or 20% or more (in firms with 3+ apprentices), then we get 16 firms; the 14 in the 'Percentages....' table plus Orion Products and S.D. Machine Tools from the preceding 'Number...' table. Also, if the 7 firms where there was only one apprentice and they were relations of someone in the firm are included, we arrive at just over a fifth of all CEES firms having a substantial number or proportion of apprentices having relatives within the firm.

(iii) Looking After One's Own

Like Chapter Sixteen, the qualitative data emphasised how it was the relatives of skilled workers that tended to be taken on as apprentices. Evidence that leading union members' qua union members relatives were taken on as apprentices was non-existent. However, a new pattern of recruitment of relatives of employees as apprentices came to light which was not

apparent in Chapter Sixteen; taking on the sons and relations of owners, directors and top management. They were 'looking after their own'. Why this was so little to the fore in Chapter Sixteen was because there the focus was on MGTS firms. The practice was rife in non-MGTS firms. Even in MGTS firms more evidence of it arose following the more direct questioning on taking on the relatives of employees. At Parkinson Bros. for example, two out of the three apprentices were sons of the Directors of the firm. At Harvey & Brinton one of the apprentices was the son of the Works Manager, and at Rex Hydraulic Components the Factory Manager had his son as an apprentice. In non-MGTS firms the practice of directors, owners and top managers getting their sons in at their firms as apprentices was more widespread. At Modern Patterns and Star Patternmaking, the only apprentice at each firm was the Owner's son. At Atkinson Engineering, the single apprentice there was the Director's nephew. Many other examples could be given.

Chapter Twelve suggested why this was happening. No doubt there had always been sons joining their father's firms - but there were factors within the local youth labour market which increased its likelihood from the mid-1970s. We saw in Chapter Twelve that apprentice No.6 from the Apprentices' Study had originally wanted to be a car mechanic. He had failed to get a car mechanic apprenticeship and eventually entered his father's firm; his father was one of the Directors at Parkinson Bros.. This case illustrates the forces at work behind this practice. Because the sons and young relatives of directors/owners/managers of engineering firms were finding it difficult to get a job in the open youth labour market in the Coventry of the late 1970s and early 1980s, their powerful older relatives were making sure that they did not join the dole queues by handing out apprenticeships. This was going on at many group A-C firms.

In the larger firms things were made more difficult for top managers and directors. The training and personnel staff were a barrier with their recruitment procedures and methods. Orion Products and Conquest International had reported top managerial pressure to give preference to their sons, but the interviewees (who were both training and personnel staff) said that such pressures had to be resisted. Indeed, there were

internal pressures working in the opposite direction. Orion Products noted that throughout the 1970s engineering firms, especially the larger firms, became more formalised in their recruitment procedures with the introduction of tests, second or third interviews, structured interviews and purpose-designed forms. The interviewee at Orion also noted that there had been a 'family tradition' within the firm:

'...years ago, (well in all companies there was), before formalised recruitment procedures were involved. 'Bill' brought 'is son 'Arry down, y'know: 'An' I've worked here for twenty years, an' 'e should 'ave a job'. There's an awful lot of older people in the company still think that should be. They think it's a right.' [Research Notes, employer's emphases].

But with formalised recruitment procedures all this went by the board - including for top managers and directors. Procedures had to be fair and neutral. The Orion Products interviewee said that he would resign if forced into accepting managers' sons; it would be unprofessional to do it. What would be the point of all the complicated apprenticeship recruitment procedures. The case of Orion shows that developments involving a greater sophistication in apprentice recruitment within the larger firms from the 1970s mitigated against top managers and directors sons and young relatives being handed apprenticeships just because of their blood ties.

Preferential Treatment for Employees' Sons and Relatives

There was a difference between giving a lad a job just because he was an employee's son (disregarding his test scores, qualifications, interview performance - everything), and giving preferential treatment if he had reached the minimum requirements. The latter was more common than the former. At some of the larger group D-E firms the general 'family tradition' of employing workers sons, as opposed to top managers' and directors' sons, still appeared to be in full swing. At Conquest International the interviewee was adamant that it was purely 'coincidental' that 30-40% of the apprentices had relations in the firm:

'That Dad works at Conquest does not imply that someone will get a job at Conquest. We take every individual on their own merits. We did a

little survey a few years ago, (just out of curiosity really), and we found that one-third of apprentices had relatives in the company...But that is coincidental.' [Research Notes].

This was hard to believe. Some form of preferential treatment in recruitment would seem plausible in explaining why 10% of Orion's apprentices had relatives at the firm but 30-40% of Conquest's had. There was little difference in advertising strategies between the two firms; the differences had to lie in other elements of the recruitment process. Preferential treatment was probably creeping in at some stage at Conquest's. At V. Broughton (Machine Tools) the interviewees more readily acknowledged that a 'family tradition' persisted. Applicants most commonly heard about the firm's apprenticeships 'on the grapevine' by 'word of mouth' according to the interviewees. Unlike Conquest International, V. Broughton's advertising policy may have gone some way towards explaining why 60% of their apprentices had relatives in the firm. The only place they advertised was in the 'Jobhunter' and then only rarely. Altex Engineering and Olmec Machine Tools admitted to partial preferential treatment for employees' sons. It was pointed out at Altex Engineering that:

'We do make a point, (I suppose it's preferential treatment really), .. if an employee's son, or daughter, applies for an apprenticeship, we will give them a selection test. We wouldn't necessarily interview them but we would give them a chance of the selection test...So they get preferential treatment up to that stage. After that everything is on their own merits.' [Research Notes].

Olmec also took a similar stance; all employees' sons, if interested in apprenticeships, were tested. After that they were on their own. Although there were tendencies within formalised procedures of recruitment which made preferential treatment for employees' sons and relatives pointless, nevertheless, some of the larger firms, in various ways and to varying degrees, still bestowed such preferential treatment.

In group A-C firms, where recruitment procedures were less formalised, and training and personnel staff were thinner on the ground, preferential treatment was more overt. The patternmaking firms commonly admitted that they had recruited employee's sons. A few of the toolmaking firms were equally candid. At Dunkley Gauge and at Atlantic Jig & Tool the taking on of

employees' sons was positively 'encouraged' - there was clear preferential treatment, although basic requirements and qualifications (for technicians at Atlantic) were stressed. A common line amongst group C firms was to say that 'everything else being equal' preference would be given to employees' sons. Certain test or qualifications requirements must be met and reasonable interview performance demonstrated before preferential treatment was given.

(iv) Discussion: The Family Way - Explanations

In this chapter, as in Chapter Sixteen, it was found that the sons and relatives of skilled workers in particular were likely to be taken on as apprentices. A further pattern of taking on sons/relatives as apprentices was discovered; the practice of giving apprenticeships to sons/relatives of top managers, directors and owners. This was widespread in non-MGTS group A-C firms who did not have training officers or personnel staff who might act as a barrier to such practices taking place out of professional pride. Powerful figures within these firms were getting their sons/relatives into apprenticeships in their firms against the external background of high youth unemployment in Coventry and restricted job choice for young people. The heaviest recruiters (in terms of proportions) of employees' sons/relatives as apprentices were mainly group C-B firms, although on numbers D-E firms were well to the fore. Amongst the group A-C firms, preferential treatment for employees' sons/relatives was more overt and they were willing to be more open about it in the interview. Up to a certain point (typically the test where it existed, or the interview if not), the sons/relatives of employees were given a clear advantage. They would be tested, they would get an interview; they would not be rejected at an earlier stage. Amongst the group D-E firms there were internal pressures, (formalised recruitment procedures, more training and personnel staff), acting against the recruitment of employees' sons/relatives on a preferential basis. But it still appeared to be going on in a few of these firms. In the larger firms it was more of a covert operation, happening despite formalised recruitment procedures. Those firms that gave a substantial advantage to employees' sons

and relatives relied on closed or restricted recruitment channels. Word of mouth recruitment could be more or less restricted. Apprenticeship vacancies might be notified to a small coterie of skilled workers or the whole workforce in a small to medium-sized firm. In larger firms notices could be put up and the knowledge of apprenticeship vacancies was open to all. Where firms gave a substantial advantage to employees' relatives it was essential to cut down the recruitment channels to only those which touched on bringing in employees' relatives. Open channels might involve either unnecessary costs (newspaper advertising) and/or bring in relative undesirables. There was an affinity between restricted recruitment channels and recruiting from employees' relatives.

In group D-E firms conflicts and tensions within managerial ranks over apprentice recruitment could arise. These tensions arose from a separation within the enterprise between those who recruited apprentices and controlled the day-to-day training arrangements and those who ultimately decided on the numbers of apprentices an enterprise could take on and the size of the training budget. For example, at Orion Products the number taken on was ultimately decided at Board level, although the interviewee stressed that EITB recommendations and the proposals from the Personnel and Training Departments were the starting points for the Board's discussions. On the level of apprentice recruitment the directors' or senior management's views always seemed to prevail. But this relative separation of those who made ultimate decisions on apprentice recruitment from those that carried out the recruitment might have other tensions residing within the structure of the relationship. One possible source of tension was where training and personnel actively attempted to pursue equal opportunities policies (for example, taking on female apprentices) but were blocked in their attempts by senior management.

Conversely, senior managements might try to impose their own choices regarding apprentice recruits on training and personnel staff. Typically this involved trying to foist their own sons and younger relatives onto the training and personnel staff as apprentices. The latter seemed to be in a position to avoid this and argued that senior managers' or directors' sons

had no right to jump the queue. A few said they would resign if it was forced through as it undermined their position and professional status.

A further source of tension over recruitment might appear lower down the hierarchy in firms with training and personnel staff. Foremen and supervisors, who often had a responsibility in apprentice recruitment and a very big involvement in apprentice training, could have their own ideas on what constituted a 'good apprentice'. To forestall some conflict with foremen and supervisors, group C-D firms in particular integrated them into the recruitment process. Foremen/supervisors interviewed candidates (usually at the later stages of recruitment), showed the candidates round the factory and occasionally helped in making the final decision about individual applicants. One possible consequence of all this integration was that the personal interests of foremen and supervisors, (especially trying to get their sons/relatives apprenticeships) and their prejudices (against black and female applicants) might intrude into the recruitment process. The integration of foremen and supervisors into apprentice recruitment had to be handled with care for those training and personnel staff who were heavily committed to professional ethics and equal opportunities. However, there were substantially fewer complaints from training and personnel staff that foremen and supervisors were either favouring their own sons/relatives or trying to block females becoming apprentices as compared with such complaints about senior managers and directors.

In firms where there were no training officers and personnel staff, and senior managers and directors recruited apprentices themselves, the tensions and possible sources of conflict were lessened, but not absolutely obliterated. Similar tensions could arise between managers and directors as occurred between training/personnel staff and managers/directors. Evidence from the qualitative data suggests that the directors usually got their way - even to the extent of bringing in their sons/relatives as apprentices. Furthermore, firms without personnel and training staff also often integrated foremen/supervisors into the recruitment process. Overall, the absence of training and personnel departments appeared to lessen sources of potential conflict over the recruitment of apprentices. Senior managers and

directors were virtually unchallenged in asserting their priorities on apprentice recruitment in these firms internally, with the exception of the age of recruits and on numbers in some firms (especially in patternmaking firms where union organisation was strong and the Coventry Patternmakers' Apprentice Agreement was enforced).

Explanations: Like Father, Like Son?

Explaining why employers give preferment to the sons/relatives of their employees is more difficult. Beveridge (1963) has argued that family recruitment must not lead to a lowering of standards, whilst Carter (1962) noted that by not spending more time on recruitment and relying on ad hoc procedures, informal networks and recruitment of employees friends and relatives, employers were more likely to recruit unsuitable youth. Dore and Oxenham (1984) have more recently argued that social screening (and family recruitment is a form of this) may lead to the misallocation of youth jobs, inequity and inefficiency. Through using restricted recruitment channels employers were unduly cutting themselves off from a wider range of potential applicants and hence undermining their competitive position through an inadequate search for high-quality applicants, it could be argued. So, why did they recruit from employees' relatives? What were the benefits? Recent work by Wood (1988), Hohn (1988), Windolf (1988c), Wood and Manwaring (1988) and Windolf and Wood (1988a) on recruitment in Britain and West Germany throws light on these questions. Although their work was mainly on adult recruitment, but with some observations on apprentice recruitment, their findings provide a useful starting point for a discussion of the recruitment of employees' relatives in relation to youth recruitment and the CEES. The following arguments hence draw both on findings and explanations from the CEES and the work of these researchers.

One benefit was that it gave the employers a useful card in the search for labour control. Apprenticeships for their sons was one of the carrots employers could dangle in front of workers, particularly key skilled men, to enhance loyalty to the firm. This was the case especially in the recession

of the early 1980s when apprenticeships and all youth jobs became scarce in Coventry. It was a fringe benefit for current employees (Wood:1988) designed to aid reliability and obligation to the firm (ibid.), and ultimately to cement control (Windolf and Wood:1988a) over employees through moral debt. Those sponsoring the apprentice (the father, uncle, friend) could also help with work discipline and keep a general eye on the young apprentice, although as we saw with the Bird Panels example earlier, the sponsors could also go against the employer if they thought their young relatives were being unfairly treated.

In Chapter Eight the importance of fitting in with the existing workforce was examined. Wood (1988) has argued that one of the attractions of family recruitment is that it gives the employer confidence that the new recruit will more easily fit into the 'collective work situation' (p.31). Not only does the new recruit know someone already there, and this may aid their adaptation to their new environment, but the employer may assume (not always correctly) that the relatives of employees share certain personality traits and work attitudes displayed by their workers. Where these were deemed as adequate then it could be assumed that the sons and nephews' personality traits and work attitudes can be developed to similar degrees. Hohn (1988) gives an example of an employer who argued that as the firm had done well with its core workers then they did not mind taking on their kids for if someone had been with the firm for 20-25 years then '...the chances are that the son or daughter will be alright.' (p.102). In terms of the analysis of Chapter Eleven, employers could assume, given their observations of the workers in their firms, that the reproduction of labour power of the offspring of their workers had attained a certain standard. They could make more informed guesses about the upbringing and stability of the home situation than with young applicants with no familial connections with the firm; like father, like son. The recruitment strategies embodying such assumptions could work to the disadvantage of some workers within the firm too. As Wood (1988) notes, recommendations from 'difficult' workers would be turned down (p.31), as it might be assumed that sons and nephews of these workers would also have a tendency to become difficult. In general then, it

was perceived as cutting the risks down of employing youth whose potential regarding the social production of key work attitudes and personality traits within their labour power was relatively low. As Windolf (1988c) has noted:

'Information which is available through the social networks (the 'intimate' knowledge of friends and relatives) is exploited by management to reduce the risks associated with those characteristics of the applicant which are particularly difficult to check as, for instance, trustworthiness and 'motivation'.' (p.199).

Managements can thus make assumptions about the personality traits and work attitudes of the relatives of workers as potential recruits based on their observations of these workers, but they also pick up bits of information, 'intimate knowledge' about the young people concerned in day-to-day conversation at work and in social life connected with work.

According to Hohn (1988), recruiting young people to apprenticeships through the word of mouth channel aided the building up of a generalised 'family atmosphere' (p.102), and the collective cohesion of labour power and hence labour itself. Furthermore, argues Hohn (1988), in firms perceived as attractive in terms of wages and working conditions, workers will make greater efforts '...to keep their job opportunities and chances of promotion to themselves.' (ibid.p.97). Thus:

'The main criterion in the recruitment process will increasingly be 'friend or relative of a member of the workforce.' (ibid.p.97).

Workers come to see the vacancies arising in these firms as their 'property' and work for and expect preferment for their friends and relatives.

Finally, recruitment through employees' relatives and friends by word of mouth or notices in the factory is cheap. Agencies such as MGTS do not have to be paid fees, it cuts out the bureaucracy of sending out forms and replying to letters and information can be passed on quickly about interviews. As Wood and Manwaring (1988) note, management can see that it is pointless to spend money on recruitment '...if they can simply tell those on the shopfloor that a vacancy exists.' (p.69).

Given these arguments for family recruitment it might seem surprising that it is not more widespread. But we noted the disadvantages of it earlier when

the phenomenon of firms having a policy of not recruiting employees' relatives was examined. In firms where the quality of labour power was deemed to be below the average by management then family firm strategies would make no sense - opposite assumptions come into play. Why recruit the relatives and friends of workers who are not perceived to be up to the mark? It also artificially restricts competition for vacancies and hence attracting talented 'outsiders', those not part of the informal social network. As Wood (1988) notes, the use of such informal recruitment channels cannot be dismissed as irrational, inefficient or casual. There was a logic behind them. Furthermore, Wood and Manwaring (1988) have argued that the use of such informal recruitment channels rose during the recession of the early 1980s. Windolf (1998c) also noted that there was a greater reliance on closed or restricted recruitment channels in the recession with the internal labour market and the social networks of employees throwing up a greater proportion of recruits from friends and relatives. Indeed, it has been argued by Windolf and Wood (1988a) that the main reaction to labour market conditions occurs not through criteria or recruitment methods, but through recruitment channels. In the recession the tendency to use the quickest and cheapest channel - word of mouth recruitment through employees - asserted itself to a greater extent (Windolf and Wood:1988a). As Wood (1988) discovered in Britain in the early 1980s recession, no firms changed the recruitment styles, introduced new methods or filters, or changed priorities between methods of recruitment. The CEES registered some changes in recruitment methods in the five years prior to interview but they were not substantial. The main change discovered by Windolf and Wood (1988a) came through recruitment channels and the intensified use of informal channels. Informal recruitment through friends and relatives of employees was the most important channel in the three regions studied (Birmingham, London, South Wales) overall. Thus, the 'primary response' (Windolf and Wood:1988a,p.3) to changing labour market conditions was not in recruitment criteria or methods but in channels. On this basis it could be argued that in tight labour market conditions when labour demand was high, employers would respond first of all, not by lowering criteria but by extending the range of their

recruitment channels.

Merely listing the reasons for recruiting employees' relatives fails to make an important distinction. If such recruitment proceeded on the basis purely, or mainly, with the aim of attaining labour control, such that this led to ignoring test scores, or not giving tests to employees' sons, recruiting employees' sons with dubious work attitudes or setting lower standards generally for employees' sons, then such a strategy ran counter to raising the quality of labour power. Labour control policy came into conflict with labour power policy in recruitment. Where the former won out then a degree of anarchy was introduced into the latter. In the next chapter a greater degree of anarchy is introduced into labour power policy as it is shown that employers in the CEES utilised race as a hidden criterion in recruitment and to an even greater extent discriminated against female applicants. This anarchy, this relative disregard of raising labour power quality in relation to these key ascriptive criteria, shows the arbitrariness and inequity of the recruitment process in the hands of agents of capital and exposes their naked social power through controlling the destiny of potential young labourers through hidden and discriminatory criteria.

Chapter Twenty-twoISSUES SURROUNDING THE CONTROL OF RECRUITMENT: HIDDEN CRITERIA - SEX AND RACE(i) Introduction

In this chapter it is argued that gender and race were important recruitment criteria used by CEES employers. Male applicants were given preference over female applicants. To a lesser extent white applicants were given preference over black applicants. CEES firms were more overtly sexist than racist in the ways recruitment criteria operated. Yet, in Part Two, there were no references to either the sex or race of applicants as attributes sought in recruitment. Sex and race figured as hidden recruitment criteria. Perhaps the fact that interviews were tape-recorded against a background of race and sex discrimination legislation made it unlikely that the CEES interviewees would admit to looking for boys or whites only. Blackburn and Mann (1979) found that sex was a perfect discriminator in the Peterborough labour market yet employers did not mention it as a recruitment criterion. There was a deep-seated assumption that some jobs were for females and others for males. A similar situation held in the CEES in relation to the sex and race of apprentices; they were perceived by employers as being for white males.

The evidence shows the situation was different for girls and black applicants. For girls, there was an assumption that if the CEES research was about apprentices it was about lads. Small firms were often amused or taken aback when asked how many female apprentices they had, and were quick to catalogue explanations about why it would be difficult to employ women as apprentices. Large firms accepted the possibility of female technicians, and had female technicians. But in terms of employing female craft apprentices the large firms were at one with the smaller firms' attitudes to female apprentices in general - the work was unsuitable for girls.

On black youth the situation was different. There was not the same antagonism to them working in manual jobs in engineering as there had been

with girls. Yet it was assumed in small and medium firms, and to a lesser extent in the larger firms, that they were more suited to semi-skilled work. That they were not usually academically capable and/or had failed the tests was brought as justification for taking this stance. But as Chapter Sixteen showed, MGTS firms were quite willing to take on white youth as apprentices who had failed miserably in the tests and who did not have the qualifications sought. Double standards were in operation. The youth labour market was racially segmented. Engineering apprenticeships were seen as a largely white preserve. Insofar as black youth were taken on in engineering firms they mainly entered as semi-skilled trainees.

The importance of this chapter for the overall argument of this Part of the thesis is that the employers needed control over the recruitment of apprentices if these hidden criteria of recruitment were to remain in force. The findings suggest that attempts by organisations such as the EITB to get more female apprentices, or the Commission for Racial Equality or the local Community Relations Council to ensure that black applicants were getting fair treatment in apprentice recruitment, would founder on employer control over recruitment. This was the ultimate issue. There were, of course, some individual employers - mainly in large firms - that ran equal opportunities policies on apprentices recruitment. But there were not enough of them, and progress was slow. Real progress would require some measure of control being wrested from employers and put into the hands of those who had the interests of all working class youth to the fore.

It is easier to show racial and sexual segmentation in the youth labour market, and to point to discrimination, than to explain them. Hohn (1988) attempts to provide an overall explanation of both forms of discrimination. This work is critically appraised in Section (iv). It is also argued there that sex and race cannot typically be labour power attributes but are hidden recruitment criteria.

(ii) The Recruitment of Female Apprentices

Control over recruitment was important in order to keep women out of

engineering apprenticeships. There were deep-seated prejudices against girls becoming engineering, particularly craft, apprentices. Keil and Newton (1980) found that there was no direct evidence of overt sexism amongst employers but rather long-standing policies of recruitment which defined jobs as men's or women's jobs. The CEES, and especially the Pilot Study, were different; overt sexism was common. In this climate organisations pushing for the greater participation of women in engineering were fighting against tough odds.

The EITB, the Careers Service and the MGTS were all attempting to get greater participation of young women in skilled engineering jobs. The EITB had been promoting the entry of the 'Girl Technician' nationally since 1976 with EEF and CSEU backing. An experimental programme was set up in the West Midlands and Surrey to encourage girls to become engineering technicians, and from 1976-1978 the EITB gave between 45 to 50 two-year scholarships sponsoring girls in their first two years of training (Keil and Newton:1980,pp105-106). From 1978, grants were available from the EITB to induce engineering employers to take on female apprentices as technicians, and from 1979 there were 250 grants per year available worth £5,000 each to firms who took on girl technicians (EEF:1979a). Swords-Isherwood (1985), using EITB statistics, has shown a slight rise in the proportion of technician apprentices who were women from 1% in 1973-74 to 4% in 1981-82 (p.79). In April 1982, only 2.4% of technicians (including draughtsmen) were female and 0.3% craftspeople (ibid.p.76). In engineering and technology further education courses in 1984, only 6% of students were female (Cockburn:1986,p.16) and of students doing craft courses in engineering and technology only 1% were women (ibid.). Thus, EITB measures to get more females into engineering in general and technician training and work in particular attained meagre success.

In interviews at Coventry Careers Centre, and through my dealings with the CCS whilst working as Research Officer for Coventry LEA, it was apparent that in general the CCS was committed to helping girls break into skilled engineering jobs. MGTS ran a week 'taster' course for girls in Coventry schools who expressed an interest in engineering. They were positive on the

greater participation of women in skilled engineering work. For engineering employers in Coventry who wanted to keep women out of apprenticeships it was a case of keeping the EITB, the Careers Service and the MGTS at bay on this issue and attempting to keep control over recruitment in this sphere.

The quantitative data was inconclusive; the mere fact that so few young women were engineering apprentices in the CEES sample shows nothing by itself. It begs the question as to whether there were sound reasons as to why there were so few; perhaps they rarely applied or maybe they did not have the right qualifications. However, an examination of the qualitative data revealed that employer prejudice against taking on girls as apprentices was rife. An explanation of why there were so few female apprentices in CEES firms must start there. But first, the quantitative data.

Table 22.1 shows the numbers and percentages of female apprentices in each size group. Of the 123 apprentices in the 49 group A firms, none were young women. Group E firms were overwhelmingly the greatest recruiters of female apprentices; 71 out of 1,179, (6%), were female. In the CEES sample only 78 out of 1,874 were female - 4%. Only twelve firms in the CEES sample had any female apprentices. Seven of these were Group E firms. Group E firms had 63% of all apprentices but 91% of all female apprentices. Ashton and Maguire (1980a) also found that it was the larger firms that were more likely to employ girls in engineering. A CDEEA Survey showed that out of 554 craft and technician apprentices recruited by 58 firms, only 13 (2%) were female. All but one were technician apprentices (Coventry & District Engineering Employers' Association:1980,p.5). Few young women were breaking into engineering apprenticeships in Coventry, as nationally, despite the efforts of the EITB, Careers Service and MGTS.

The larger firms had a better record of taking on females as apprentices. They were more likely to have professional trainers and personnel staff who gave credence to equal opportunities in recruitment. In the previous chapter the social power of the owners and directors in small firms to discriminate in favour of their own and their employees' relatives was noted. It could be argued that these smaller firms were more

Table 22.1 : THE NUMBER OF FEMALE APPRENTICES IN THE CEES SAMPLE FIRMS. AND AS PERCENTAGE OF ALL APPRENTICES - BY SIZE OF FIRM

Size Groups (and no. of apprentices in size groups)	(1) Number of Female apprentices employed	(2) % of apprentices who were FEMALE
GROUP A, up to 50, (n=123)	0	0
GROUP B, 51-100, (n=60)	1	2
GROUP C, 101-500, (n=245)	2	1
GROUP D, 501-1000, (n=267)	4	1
GROUP E, 1001+, (n=1179)	71	6
ALL FIRMS, (n=1874)	78	4

impervious to equal opportunities considerations in general as there was no need to employ professional personnel staff. Powerful individuals could force through their priorities in recruitment more easily. It was further argued that in these firms, with their restricted recruitment channels, it was male relatives of workers that would get preferment. These employers always spoke in terms of the sons of skilled men getting varying degrees of advantage in recruitment. CEES firms also argued that girls might be acceptable as technicians but not as craft, and few technician apprentices were employed in the small group A-B firms; in fact only 18, 2% of all technician apprentices. These factors and the fact that the smaller firms tended to have a very close-knit male-oriented shopfloor culture made it more likely that the larger firms would employ more females as apprentices.

Table 22.2 examines whether similar questions were asked to young women as were asked to young men in the interviews for apprenticeship. A staggering 65 firms (61%) said that they had **never** interviewed a girl for an apprenticeship. One firm, Passmore Turbines said that girls were 'not interviewed seriously'. It was group A-B firms with their restricted recruitment channels which favoured the recruitment of male relatives of exiting employees, with their sometimes autocratic owners and directors who recruited employees' and their own relatives, and their macho shopfloor

cultures, that were particularly unlikely to have interviewed young women.

Table 22.2 will be examined in detail later in this section. In the next two sub-sections the qualitative data is examined with reference to the reasons why employers in the CEES were reluctant to take on female apprentices. Some of the reasons given for not taking on girls as apprentices were ludicrous. Others bordered on excuses rather than real reasons. Many of these explanations were shot through with sexism, simple dislike of women and sexual innuendo. Five firms in particular were blatantly anti-women in relationship to shopfloor work and apprenticeships.

The Infamous Five: Those firms Not Wanting Female Apprentices

As the interviews were on tape it might have been expected that few of the engineering employers would admit that 'females were not wanted'. These expectations were born out; only five firms made it abundantly clear that girl apprentices were an untenable proposition. At Deltron Radiators, General Managers blocked any female applications for apprenticeships. The Training Department put female applicants forward up to the shortlist stage, but the General Managers (Heads of various departments) always turned them down. One of these General Managers did not think it right to have 'young ladies on the shopfloor' and let it be known to the Training Department. He had left the firm in the last round of redundancies, but the interviewee (a woman and Deltron's Training Officer) suspected that the others shared these views. D. & L. Patterns were less circumspect: 'We don't employ ladies at all; we have no need for them.' [Research Notes], with the implication being that ladies did not become skilled patternmakers, and there were no ladies' jobs - typists, cleaners - at D. & L. Patterns. Passmore Turbines explained that they did not interview girls seriously for apprenticeships - for various reasons which we shall examine later. At Imperial Carriers there was a similar situation to Deltron. The Training Department had tried to recruit a female technician in 1978 but:

'...one of the gaffers, (y'know), who's area she was destined for said: 'No way am I 'avin' a female in 'ere!'. An' that was that, y'know. If they won't 'ave her that's it; she's on a hidin'-t'-nothin'.' [Research

Notes].

Departmental Heads again blocked female entrants. At S.D Machine Tools, it was the training and personnel department that were just as much against female apprentices as Deltron and Imperial Carriers departmental heads:

'Well fortunately, ('fortunately' - I shouldn't say that),..uhm ..[silence]..it is a fact that we almost **never** get applications from ladies. They seem to know that it is basically an industrial, and man's environment. And indeed it is. It's heavy; some of the machines weigh fifteen tons, and some of the components weigh tons. It is difficult, it's dirty; there's black dust which gets in the skin; it isn't ladies work.' [Research Notes, employer's emphases].

S.D. Machine Tools' argument that engineering was dirty and therefore not suitable for girls was a common 'explanation' as to why there were no female apprentices at the firm. The explanation that girls did not have the physical strength to do the work was commonly noted. Yet which male apprentices in S.D. could lift fifteen tons worth of machinery? Arguments about girls lack of strength often referred to heavy machinery. Machines were heavy, as witnessed when employers showed me round their premises, but they were lifted by cranes or lifting gear or installed by the manufacturers or firm hiring them out. No superhuman male apprentices pumped up with steroids would be lifting them.

Challenging the strength explanation revealed yet further explanations based on strength as to why females were not recruited. When it was pointed out that there was lifting gear, or, that girls or anyone else would not be lifting machines unaided, the usual reply was to point out that some of the tools and materials were quite heavy. Also lifting gear was not always appropriate in terms of the time it took. Yet these arguments about strength made little sense given the size of some of the male apprentices in the Apprentices' Study. Furthermore, having worked in an engineering factory as a production worker, it became apparent that strength is something that develops as a labour power attribute very rapidly. Day-to-day lifting of metal develops muscles. Swords-Isherwood (1985) has argued that employers who use justifications as to why they do not employ women in skilled engineering work based on the strength required or dirt use 'a great deal of

doublethink.'(p.81). First, in jobs in engineering which are not generally dirty (professional engineering jobs, technicians) there are few women. Secondly, women are employed in unskilled and semi-skilled jobs in engineering which are more likely to be dirty and be physically strenuous (ibid.). On EITB statistics, in 1982, 27% of all operators were women (ibid.p.76). The employers' arguments about strength and dirt rest on shaky empirical evidence. Swords-Isherwood (1985) rightly concluded that such arguments are really about excluding women from skilled work in engineering.

These five firms were the most clearly against employing females as apprentices. Yet it was only a matter of degree. The sort of explanations that other firms put forward as to why they did not have any female apprentices at the point of interview left little doubt that they did not really want them either. Finally, physical qualities were of minimal importance as attributes sought in applicants (Table 6.5, Chapter Six). Yet for female applicants the importance of one of these qualities, strength, became crucial as a recruitment criterion - a further example of double standards.

Explanations and Justifications given by CEES Employers

Passmore Turbines produced a range of reasons as to why they did not 'interview girls seriously'. Their arguments about toilets were particularly lengthy. This explanation was the most **commonly** used one; there were no women's toilets available in the areas where craft apprentices were expected to work. The lack of female craft apprentices in British engineering firms was basically due to plumbing technicalities and lack of space for toilets. The cost of installing toilets for women was also oft quoted. Even large group E firms were suffering from toilet difficulties. At Casablanca Cars, one of the large firms sympathetic to employing girls as technicians, but not craft apprentices, it was explained that as girls failed the test then:

E '...we've never had a girl at interview for craft yet. Personally I got my doubts about girls for craft..[silence]..

G Which aspects of the tests do they usually fall down on?

E Usually the spatial one, but if they come through that we would

interview them. We would try and find out just why they wanted to be a craftsman. As I say, (I know this is a stock answer), but we've no facilities here. In the toolroom, if we had a girl in the toolroom, she would have to walk two or three hundred yards away for the ladies loo!'[Research Notes, employer's emphases].

What started as an explanation about girls not being taken on because they failed the tests moved onto an expression of doubt about taking girls on as craft at all. The latter was justified in terms of a shortage of toilets. The interviewee went on to explain that for the female technicians in the office areas there was no problem; toilets were there. He then went back to the original issue of tests. The girls did not get through the tests because they did not do physics or metalwork at school. It was an explanation often used by large group D-E firms. These firms bemoaned the fact that most girls did not do physics. The schools were blamed. Yet many A-C firms did not demand physics, and some did not demand any qualifications, but they were even less likely to employ female apprentices than the larger firms where these qualifications were demanded. The explanation only held for the larger firms insofar as it held at all. Chapter Nine showed that some MGTS firms that did specify physics were willing to take on male apprentices without physics. Furthermore, the scientific knowledge needed was taught on day release. Only for large firms with tests (involving aspects of physics) and stringent qualifications for physics was 'not having physics' a real explanation. Court (Manufacturing) made much out of the fact that girls had not usually done metalwork at school, yet two out of the three apprentices they had recruited in 1980 - all male - had not done metalwork. Thus, claims that the absence of female apprentices could be explained by the fact that female applicants had not done certain subjects were suspect given further investigation. There were cases where boys were taken on without these qualifications (Chapter Nine). Griffiths (1985) provides further evidence that explanations of the absence of girls in engineering resting on test scores were suspect. In relation to spatial ability test scores she draws on American research to argue that:

'Sex differences in tests of spatial ability are certainly not large enough to account for the differential representation of women and men in engineering. If female entry into engineering was based on the distribution of spatial ability alone then the ratio of women to men

would be 2:3 rather than 1:300.' (p.53).

Griffiths goes on to argue that in other components of tests used in engineering and technology, in particular maths and science, girls do less well than boys as by adolescence these subjects are perceived as being male subjects. These perceptions are bolstered by:

'...educational, psychological and sociological pressures discouraging female achievement in spatial and mathematical skills, and hence women's participation in technology.' (ibid.).

Keil and Newton (1980) found considerable opposition to girls wanting to go into engineering in many schools. Fifty-three per cent of the female engineering technicians they studied said that they had wanted to do technical subjects such as woodwork, metalwork or technical drawing at school but had not been able to do it. Some Heads were against EITB members giving careers talks to girls (ibid.p.106). These are discriminatory practices. Yet arguments which point to the schools as reproducing gender divisions (Deem:1980a), as girls were less likely to do the technical subjects demanded by employers, and calling for a core curriculum to remedy this (Deem:1980c), miss the point. CEES employers were willing to take on boys without these subjects but bemoaned the fact that girls did not have them. It can only be concluded that double standards were in operation here, and that girls were not wanted whatever their academic achievements. The fact that girls did not have apparently crucial subjects yet boys were recruited without them suggests the former was used as a 'justification' for not employing girls when employers had no intention of employing them. If girls did have all the technical subjects then it would undermine this type of justification. It would not guarantee any fundamental change of employers' attitudes.

Group A-C firms often used the argument that girls would not like working in an environment where all or nearly all workers were male. Ashton and Maguire (1980a) also noted employers' belief that women would not cope with the behaviour and language of male shopfloor workers. In particular they would not like the shopfloor banter, the swearing, the dirty jobs and the general macho environment. Even large firms pointed this out. At least in the larger

firms there would be more female workers - as operatives and assembly workers, office and cleaning staff - with whom the female apprentice could strike up social relationships. In the few firms with female craft apprentices, the point was made that they were looking for 'tough' girls who could withstand the male chauvinism and foul language of the shopfloor. This could be important for technicians too as they might have to work in craft areas on particular projects, and technicians did part of their training in craft areas. The interviewee at Wingfield Transmissions, who had a female technician apprentice, explained how:

'...she came over quite good in the interview, but what I had to do was to make sure what she was lettin' herself in for on the shopfloor. So with Marie I made a point of takin' her round the shopfloor, to the more boisterous sections where she'd get some verbal. And she got it! And she stood up well to it. That's the main worry; to make sure they know what it's all about.'[Research Notes].

When group A-C firms said that girls were 'not interested in engineering' a common explanation of this was that girls did not like working in male-dominated environments. They had the sexism of the shopfloor in mind as well as the dirt, dust and heavy work involved. A combination of these factors led Star Patternmaking to conclude that engineering for girls was 'unladylike'. Star Patternmaking pointed out that foundry work was the worst type of work for girls in engineering; they would get scars on their legs. Others saw engineering as degrading and demeaning for young women. As Island Manufacturing Co. from the Pilot Study graphically put it:

'I wouldn't want any daughter of mine to lug tools and stuff about..[Laughs - sexual innuendo]..'[Research Notes:Pilot Study].

Working in a toolroom was not feminine according to Island, although the interviewee added that he did not want female apprentices at all:

'...for here. I've nothing against them working somewhere else, because a lot depends on the type of work each company does.'[Research Notes:Pilot Study, employer's emphasis].

For example, where a company made small tools and the work was lighter and more 'fiddly', argued Island. The general point was that the type of work determined whether female apprentices were suitable according to Island.

Women were useful for intricate assembly work and where products were light. Yet in small group A-B CEES firms making small items such as gauges and cutting tools there were almost no women apprentices. The type and size of product seemed irrelevant as to whether women became apprentices.

A few firms saw female apprentices as sexually threatening and disruptive. Any females at work were risky; they inflamed male passions. At Bird Panels, (where the interviewee had actually taken on girls as apprentices at one of the firms within the Bird group) it was pointed out that you had to watch out that female apprentices did not form strong emotional ties with either male apprentices or young men outside work. If parents refused to persuade the young people not to mix romance with work there was not much that could be done about this. One of the two young women taken on at Bird's subsidiary had left because she 'got involved with a young man'. But women could be disruptive in a more insidious way:

E 'I'm not a male chauvinist pig by any means, but women in industry are a pain! Because they are women. Er,..[silence]..or rather let's say, that they are a pain..[silence]..

G What, because they get married and leave?

E No, no. It's the fact that they are there and the effect that they have on the men working there.

G What, wolf-whistling and...[interrupted]..

E Not so much that as, you know, we're all men. We're all attracted by women, (well, most of us are!) and where a woman is about men react. You know, and, I'm no more innocent, or guilty, than the next guy! I mean, inevitably when I'm talking to someone and a nice girl goes by, and whoaaa!! You don't know what you're talking about for the next fifteen or twenty seconds! They are a disruptive element. No, I, I hope we don't see girl apprentices because I think it would be very disruptive. Er,..[glances at tape-recorder]..but I wouldn't be biased against it.' [Medco Engineering:Research Notes,Pilot Study].

This example from the Pilot Study was the most blatantly negative response to the idea of female apprentices. It was almost matched at Conquest International in the CEES with lurid tales about managers screwing young girls on desk tops. Male interviewees who saw the mere presence of any women at work as potentially disruptive due to their sexual 'provocativeness' [Conquest], were unlikely to be keen on female apprentices. Their disruptiveness as women also had another aspect; they were always liable to

get married and leave, even during their apprenticeships. Compared to young males they were a bad risk, a potentially poor investment.

This last point came out most frequently in relation to the data pertaining to Table 22.2. Those firms asking 'additional questions' invariably asked questions to see how interested female applicants were in a **career**. At an employers' conference in the 1950s it was argued that girls were less 'stable' than boys in this respect (FBI:1958,p.14). Beverstock (1964) noted that employers were loath to take on girls as apprentices as they 'had no sense of career' but were just filling in time before marriage (p.56). CEES employers were still thinking along similar lines in the 1980s. D. Clarke (Engineers) explained the reasoning behind 'additional' questions for girls:

'One of the problems for a girl, compared to a chap, is er, I mean I've interviewed **numerous** girls, and the biggest thing I'm interested in is whether they want a **career**. You see, when I've got a boy apprentice he's not hamstrung - he can, (by the age of 19), get married. It has no effect on 'im. He's, 'e's **free**. In lots of respects, with a young girl, if you take 'em on an' they get married they're shackled. I mean,..[silence]..they can't just make easy decisions like a man can.'
[Research Notes, employer's emphases].

Having children, to get home early (and hence refuse overtime) to cook the husband's meals or look after kids, or to refuse shift work; all made a female apprentice a relatively poor investment. For the female apprentice/craftswoman home and work life were in conflict. Not so for the male. Indeed, Minex argued that marriage often made young men more not less interested in work. Engagement could have the same effect. For young women in skilled engineering jobs marriage was not looked on so favourably by employers. The employers' view that womens' role was sooner or later going to be a domestic one deterred them from offering training opportunities to women (Economic Development Committee, WMCC:1984). They were less likely to recoup training costs through production as compared with males due to women leaving in greater numbers for domestic reasons. Beverstock (1964) noted that there was a reluctance to employ girls as apprentices in engineering as marriage affected their work, forcing them to give it up once they had babies. Female apprentices who finished their training, did a few years work and then had time off to have babies, were not catered for. Keil and Newton

Table 22.2 : WHETHER SIMILAR QUESTIONS WERE ASKED TO FEMALE AS MALE APPLICANTS IN INTERVIEWS FOR APPRENTICESHIP - BY FIRM SIZE

SIZE OF FIRM	GROUP A up to 50 (n=49)	GROUP B 51-100 (n=13)	GROUP C 101-500 (n=25)	GROUP D 501-1000 (n=10)	GROUP E 1001+ (n=10)	ALL FIRMS (n=107)
If girls asked similar questions to boys in interviews	% of firms who..	% of firms who..	% of firms who..	% of firms who..	% of firms who..	% of firms who..
YES- Asked similar questions	14	23	16	45	67	24
NO- Asked different questions	2	0	8	10	5	4
Asked ADDITIONAL ques- tions to girls. Basic questions the same	0	8	4	15	18	5
Did not interview girls seriously for apprenticeships	0	0	4	0	0	1
NEVER interviewed a girl for apprenticeship	82	62	56	30	0	61
Did Not Know	2	8	12	0	10	6
TOTALS	100	101	100	100	100	101

Notes: At Burfield Engineering the response was 'Yes' in relation to girls going for technician apprenticeships, but for those going for craft 'Additional questions' were asked. The score was allocated on the proportion of craft/technician apprentices at Burfield. Two others had split answers: Minex was a 'Yes' for those applying for craft; 'Additional questions' for technicians. Casablanca Cars was 'Yes' for those applying for technicians; 'Additional questions' for craft. Scores were allocated as for Burfield.

(1980) found that few engineering employers had re-training schemes for skilled female workers who wanted to return to work after having children.

It was group D-E firms that tended to ask 'additional questions'. In the smaller firms, where more of the training was done on-the-job and through production work, the costs of apprenticeship were lower relative to the larger firms with their training schools. In the former it was less of a disaster if apprentices left shortly after completing their apprenticeship. For group D-E firms where there was a greater investment in training and

less production work done during apprenticeship, there was more emphasis on a career, and the apprentice staying with the firm, to recoup training costs through utilising the labour power socially produced. This explains the greater stress on 'additional questions' to girls in Table 22.2; they wanted assurances that girls would stay long enough to recoup some of the money invested in the social production of their labour power.

Apart from questions about whether girls wanted a career, other 'additional questions' centred around girls' mechanical understanding on things that they were familiar with (for example, how an iron works), how they felt about working in an all-male environment, and why they wanted to come into engineering rather than traditional female jobs. These were the main areas of additional questioning. The larger the firm the more likely it was that boys and girls would be asked similar types of questions. This reflects the generally less hostile attitude towards female apprentices in the larger firms and the fact that more regard was given to equal opportunities with the greater number of professional personnel and training staff involved in recruitment. Griffiths (1985,p.69) has argued that the larger firms were more concerned about their public image and hence wanted to recruit a few women in engineering. Indeed, there were even a few (five) female recruiters in the group C-E firms who were particularly keen on girls becoming apprentices. These factors go some way towards explaining the greater employment of females as engineering apprentices in large firms, but further detailed empirical study of this issue would ultimately be required.

Although large firms were generally more sympathetic to the idea of employing female apprentices, and employed more, most stretched such sympathy towards taking on only female **technicians**. Casablanca Cars were keen on taking on female technicians but doubtful about taking on female craft apprentices. Altex Engineering admitted that they viewed commercial apprenticeships as one of the 'ladies professions' and tried to steer female applicants towards these. Girls taken on as technicians were 'viable', (Altex Engineering had one) but not for craft. At firms like Altex Engineering and Casablanca the catalogue of reasons as to why females were not suitable as apprentices outlined above came into play for **craft**

applicants only. At Carbitool there was a tradition of girls becoming laboratory technicians, and '...that's the sort of thing they come along and apply for. Rarely do we get an application other than laboratory.' [Research Notes, employer's emphasis]. Only **two** firms talked enthusiastically about taking on girls as craft apprentices: Wroxborough Jig & Gauge, (where their female craft apprentice had won a prize - the Blundell Trophy), and at Transco (where the Recruitment Officer was a woman). Yet even the Transco interviewee put the blame for girls' reluctance to enter engineering on the girls themselves:

'On the whole, girls aren't interested in engineering. Acts of Parliament don't make girls interested in engineering and becomin' engineers, anymore than it can change attitudes. I wish they **would** change. But they're not changin' very rapidly.' [Research Notes, employers emphases].

The EITB's grant system did not seem to have made much of an impact in the CEES firms in encouraging the 'Girl Technician'. Although there was no systematic search for such examples, only one, from Conquest International, emerged. The catalogue of reasons for not taking on girls as apprentices - technician or craft - meant that many CEES firms were going to keep the EITB, Careers Service and MGTS at bay on this issue. Control over the sex of apprentice recruits would not be relinquished easily. EITB incentives and Careers Service and MGTS persuasion (two MGTS firms said they had been asked if they were interested in taking on female apprentices, but had declined to do so), would seem insufficient. Auto-Gears believed EITB incentives for female technician recruitment were positively harmful as apprentices were no longer being recruited on merit. But employers who ignored test scores and recruited employees' sons were not always recruiting on merit either. With the deep-seated prejudices against female technicians, Auto-Gears' argument that girls would be recruited if they were good enough was untenable. It was less true that female craft applicants would be taken on 'on merit'. The extent to which CEES employers controlled entry into apprenticeships ensured that only very gradually would the proportion of female apprentices in engineering increase. Indeed, Coventry Careers Service statistics showed that since the 1980/82 recession girls were less likely to be engineering

apprentices as compared with the late 1970s.

The employers' explanations of why they did not take on young women as apprentices have been critically examined in this sub-section. These specific explanations were often found wanting in terms of evidence, consistency and application. They appeared more as justifications than explanations. The next sub-section provides a general explanation of the relative exclusion of females from engineering apprenticeships.

The Exclusion of Young Women from Engineering Apprenticeships

In the previous two sub-sections it was argued that some of the explanations given by CEES employers as to why they did not recruit girls as apprentices were rather justifications, even mere excuses, for not employing them rather than real explanations. Arguments on the strength needed for the work, its dirty nature and tests results were seen as being especially dubious. Double standards and doublethink were in evidence as devices to justify the exclusion of young women. Whilst arguments about toilets and plumbing bordered on the bizarre.

What was particularly striking from the qualitative data was that CEES employers seemed to be working with notions of what constituted female and male work; skilled jobs in engineering, especially craft jobs, was work for men. Work by Cockburn (1983,1985,1986,1987) is useful on the issue of why women are excluded from skilled work in industry in general and the way in which work in general is divided up as being either women's or men's work in the consciousness of both employers and workers. This work seems pertinent to explaining why women were relatively excluded from apprenticeships and skilled work in engineering.

As early as her (1983) work Cockburn emphasised that the ideology underpinning the differentiation of jobs into male and female jobs rested on material practices. Jobs may be gendered, jobs may be perceived as being 'traditionally' either male or female jobs (Ashton and Maguire:1980a), managers may have a conception of what constitutes men's and women's work

(Keil and Newton:1980) and the total result may be a sex-differentiated labour market for youth (Sawdon, Pelican and Tucker:1981) - but underlying this are specific material practices. It is not just the case that employers and managers exhibit male chauvinism, prejudice and sexist attitudes, for the 'problem of women in society is not just a matter of ideas'(Cockburn:1983,p205). In her (1983) Cockburn aimed to show that '...there is a complex set of material circumstances underlying such ideologies.'(ibid.). In her study of the print and compositors in particular she uncovers these material practices and how they contributed towards the exclusion of women from skilled work in the print and provide the material basis for the ideology which sustains the inferior social position of women in work. Thus, the material practices involved in compositing shows that it:

'...is one of the many 'male jobs' that has contributed to the construction of men as strong, manually able and technologically endowed, and women as physically weak and technically incompetent.'
(Cockburn:1983,p.203).

The material practices of compositing sustain and reflect the ideological aspects described earlier. She also demonstrates the historical dimension, how these material practices and ideological effects come to be formed over time, the impact of state legislation and the interventions of religious organisations and ideology as contributing towards the dominance of males in skilled work in the print. These points are elaborated and extended in her later work (Cockburn:1985,1986,1987). This work would be a useful starting point for the development of why CEES employers held the view that skilled manual work in engineering was basically male work. But to construct an historical account along the lines of Cockburn (1983,1985) in relation to skilled work in engineering is well beyond the scope of this thesis and beyond the research and fieldwork carried out for the CEES, although it might be one way in which the thesis could be developed. Instead, a general explanation of sex (and race) discrimination given by Hohn (1988) is examined in a later section. This explanation is important for the thesis as it opens up a further perspective on the arguments concerning aspects of labour power examined in Chapter Six.

The following section concentrates on race as a recruitment criterion. As with sex, there is no attempt at framing specific explanations of why CEES employers took race as a criterion in recruitment. This would be an impossible task at this stage, requiring further research and a major extension of the thesis. Rather, the final section examines the work of Hohn (1988) which attempts to provide a general overall explanation of the importance of sex and race as criteria of recruitment. The approach taken in the final section is to work out the implications of the importance of sex and race as recruitment criteria for the empirical argument of the thesis and not to offer specific explanations of their importance. The crucial question is: given that sex, and to a lesser extent race, figure as recruitment criteria, what does this demonstrate about the recruitment process and about employers' labour power strategies?

(iii) The Recruitment of Black Apprentices

CEES firms seemed less overtly racist than they were sexist on their recruitment criteria. Unlike the situation with female apprentices, where some firms clearly said that they did not wish to employ young women, or (more frequently) they were not suitable, no parallel comments pertaining to black apprentices emerged from the qualitative data. CEES firms did not go into long explanations about why they did not employ black apprentices. Nevertheless, there are grounds for holding that some firms were taking race into account in their recruitment criteria. But compared with firms recruiting on sex criteria it is more difficult to pinpoint which firms these were. More detailed work would be required on this question. The methods were far too unsophisticated on this issue to reveal the extent of racial prejudice in apprentice recruitment. The quantitative data provides grounds for concluding that selection along racial lines was taking place in the CEES sample overall. Let us examine this evidence.

CEES firms were asked two questions: how many West Indian and Asian apprentices they had. Employers in the Pilot Study tended to view all Afro-Caribbeans as basically West Indian no matter where they had originated from, which was probably why the Coventry CRC (1976) had used the latter classification in their research. Results revealed that only 12 firms had West Indian apprentices and 18 had Asian apprentices. As expected, due to the greater number of apprentices involved, the larger the firm the more likely it was to have black apprentices. Unlike the case with employing females as apprentices, large firms were not appreciably more likely to employ blacks as apprentices than small firms. No evidence from the quantitative or qualitative data or contextual factors suggested why this difference between race and sex was apparent. Further investigations would be required. Overall only 24% of CEES firms had either West Indian or Asian apprentices. From an analysis of the proportion of black apprentices in each size group there was little difference between small and large firms. Overall, 1% of apprentices in the CEES were West Indian, 3% Asian and 4% were either West Indian or Asian - about the same proportion as female apprentices. Only one firm, Classic Engineering, had apprentices that were

Table 22.3 : THE PERCENTAGE OF APPRENTICES WHO WERE BLACK - BY SIZE GROUP

SIZE GROUP	WEST INDIAN	ASIAN	WEST INDIAN or ASIAN
%age of GROUP A apprentices (n=123) who were:	1	4	5
%age of GROUP B apprentices (n=58) who were:	0	3	3
%age of GROUP C apprentices (n=245) who were:	1	2	3
%age of GROUP D apprentices (n=267) who were:	1	3	4
%age of GROUP E apprentices (n=612) who were:	2	3	5
%age of ALL Apprentices (n=1305) who were:	1	3	4

Notes: Excludes apprentices from Ace Patternmakers (who refused to answer race questions) and three group E firms who could not estimate how many black apprentices they had: H.F.C. (UK) Ltd., Transco and Acapulco Cars.

all black; only one apprentice was involved.

The overall proportion of black apprentices in CEES firms (4%) would suggest that selection of apprentices along racial lines was taking place. Pollert (1986) gives a figure of 15% of school leavers in Coventry being black. A paper produced by Coventry Education Department Forward Planning Unit (1984a) shows that between 15-17% of the Coventry secondary school population were black. This paper said nothing about the staying-on rate of black pupils. If this was higher than for whites it would affect the numbers of black youth who were potential apprentices in the youth labour market at 16. But the staying-on rate would have to have been phenomenal for this to account for the differences in the numbers taken on. Even taking into account that black school leavers were less likely to apply for apprenticeships in engineering than whites (Coventry CRC:1976,p.17), the relative under-representation of young blacks as engineering apprentices suggests selection along racial lines. CEES firms tended to view jobs for young blacks as being semi/unskilled jobs rather than skilled. There was partial segmentation of the labour force resulting from giving whites access to skilled engineering jobs. A Coventry CRC (1976) study found that black youth, even when they had the appropriate qualifications, were less likely

to get apprenticeships than whites. Frith and Buckley (1978) concluded that:

'...after interviewing Coventry employers..[it seems that].. what is involved is less racial prejudice at the level of individual recruitment than a general and implicit distinction between white, Asian and West Indian jobs.'

The employers interviewed were mainly engineering employers. Certainly the formal investigation of the Massey-Ferguson plant by the Commission for Racial Equality (1982) would seem to support this view. It was found that out of 46 Asian applicants for apprenticeships in 1977-78 at Massey-Ferguson, (4% of all applications) not one was successful, and only two got as far as the final (2nd) interview (ibid.p.16). Asian youth were not seen as appropriate for apprenticeships. This racial segmentation was also found from an examination of the qualitative data in the CEES.

First, in line with the Coventry CRC's (1976) findings, about a third of group A-C firms reported that either none or few black youth applied for apprenticeships. But this might have been because they did not feel they had much chance of getting them. Secondly, another third of group A-C firms reported that they had had young black people, but not as apprentices, only as semi/unskilled trainees. A typical comment was:

E 'Er, no..[silence].. We did 'ave one West Indian a couple of years back, but 'e left on 'is own accord.

G He was indentured?

E No. 'E was 'bits-an'-bobs', an' weldin' an' such.' [E.G.M. Engineering Research Notes].

There were examples in the CEES of firms viewing Asian applicants as more suitable for apprenticeships than West Indians. Olmec Machine Tools emphasised that they did 'very well' with Asian apprentices but they had not recruited any West Indians as apprentices for four years. None of the young people taken on for the firm's new electronics apprenticeships had been black however as:

'...one thing you have to remember is that this year's apprenticeships we were interviewing for a very high standard; (three 'O' levels - English, maths and physics), before we've even started.' [Research Notes].

The implication here being that West Indian and Asian apprentices were not up to these 'high standards'. However, Pollert (1986) points to research in Coventry which showed that black YTS entrants had better qualifications than whites, which according to her challenged the whole notion of black youth being unemployed because they had worse qualifications than whites. She also refers to research by Lee and Wrench which showed that where young black and whites had the same qualifications the former had much less chance of getting craft and technician apprenticeships (ibid,p.180). Frith (1980a) argues from his research in Coventry with (mainly engineering) employers that qualifications only became relevant when all else was equal. But as youth jobs were partly allocated on sex and race criteria things were hardly ever equal. These arguments put Olmec's claim that black youth were not up to the 'high standards' of whites into a clearer perspective. At Acapulco Cars the interviewee also saw Asians in a more favourable light:

'But in all honesty we, (perhaps 'ow we pick 'em), but I don't think the West Indian don't seem to stay as well as the Asians; got more of a chip on their shoulders, than the er, Asian lads. They seem to wanna do well the Asians. I don't know about the West Indians.'[Research Notes,employer's emphasis].

His tone of voice suggested that he did 'know' but did not care to say it on tape. At Bell Components the interviewee explained that their:

'...skilled Asian workforce have come through the operative ranks, where they 'aven't been bright enough to make apprenticeships, didn't make the grade, (possibly because of a bit of colour prejudice)...and subsequently taken on an operatives' job 'ere, very keen to make the grade and work 'ere, because they know that if they make the grade there's no prejudice at this company.'[Research Notes,employer's emphases].

The interviewee at Bell Components was articulating one way in which the racially segmented workforce in Coventry engineering was socially constructed. Asians tended to go into semi-skilled operative jobs in other firms. This was because there was prejudice against them being apprentices. Yet firms like Bell enabled them to become skilled, and put them on the skilled rate, if they worked hard enough and were keen. In this way Bell 'got quite a lot of skilled Asians.' This was one way of getting skilled workers without financing training costs involved in apprenticeships. Bell

were willing to pay these costs for white apprentices. The sort of firm that the Bell interviewee had in mind when he said that other firms had Asians, but not as skilled workers, was a firm such as Hills Gears who had 'a lot' of young black workers on the shopfloor, but not as apprentices.

The examples above suggests that Frith and Buckley's (1978) characterisation of the youth labour market in Coventry as having Asian/West Indian and white jobs was a central feature of the way youth entered engineering jobs in the City. Whites had a greater chance of getting apprenticeships than both West Indians and Asians. At some firms Asians had more chance of getting apprenticeships than West Indians. Black job seekers in general were viewed as potential semi-skilled workers. How did firms justify these practices?

For firms with tests the overwhelming response was: 'they don't get through the tests'. It was difficult to check on this. Access to the tests was highly restricted on the grounds that the firm would lose its licence to run the test. Yet MGTS firms recruited a substantial number of 'test failures' - all white (Chapter Sixteen). It was a case of double standards. For a few MGTS firms the response was to point the finger at MGTS; they did not send black apprentices. Talcott Metals came close to saying that MGTS' recruitment policies were racist:

'We've had letters from West Indians and Asians. But they either don't get through the tests or Midland Group Training are not sending them - it may be just something they're doin' off their own bat.' [Research Notes].

It was the case that MGTS firms recruited a marginally smaller proportion (3.7%) of apprentices who were black than non-MGTS firms (4.5%). Whether this was due to racist recruitment practices being more prevalent in MGTS firms was difficult to say. But certainly, having spent many whole days with MGTS staff and interviewed MGTS recruiters, it would seem unlikely that insofar as there were racial considerations entering apprentice recruitment practices they were initiated by MGTS. MGTS staff seemed as committed to equal opportunities here as with the recruitment of female apprentices. Collusion was more likely; MGTS simply did not send black applicants to those firms that intimated they did not want them. Pollert (1986) reports

similar collusion between racist employers and the YTS Managing Agents in the West Midlands.

To maintain racial segmentation in the youth labour market in engineering control of the recruitment process was crucial. Radical interference in the recruitment of apprentices in engineering in Coventry by a combination of the local Community Relations Council, an aggressive stance on racial equality by the Careers Service and the MGTS would start to undermine this segmentation. But it could be argued that given the views of CEES employers about which jobs were appropriate for Whites/West Indians/Asians, then as long as these employers had a substantial degree of control over the recruitment of apprentices, then the breakdown of racial segmentation of the youth labour market in engineering will be a slow, maybe endless, process. But how can racial segmentation in youth jobs in Coventry be explained? Of course, it was not just a Coventry phenomenon. The nationwide phenomenon of young blacks being discriminated against in apprentice recruitment was widely appreciated by the late 1970s and it prompted a few resolutions at the AUEW National Conference in 1979 (AUEW:1979) which argued against it. The next sub-section does not provide an explanation of why race figured as a recruitment criterion in apprentice recruitment in Coventry but sketches out a strategy through which explanations might arise.

Race as a Criterion in Engineering Apprentice Recruitment in Coventry: Towards An Explanation

Frith and Buckley (1978) rightly pointed out that engineering employers in Coventry tended to allocate youth jobs according to race. Apprenticeships were defined largely as being for white male youth. But pointing to this fact does not explain it. Why did engineering employers in Coventry carry around particular notions in their heads about which jobs were appropriate for young blacks and whites and what forces shaped these notions? On this issue Cockburn's general approach outlined in the previous section would seem pertinent.

It could be argued that the conceptions that engineering employers had about

which jobs in engineering were suitable for which racial groups were not just ideas, prejudices or irrational misconceptions but were related to specific material practices. On this issue Landa and Simmons (1981) provide a useful starting point. They argue that the racial segregation of labour in Coventry must be understood in terms of imperialism and the way that black labour was used by Britain in the 1950s and 1960s. During this time Britain experienced labour shortages and blacks were encouraged to come to Britain to fill unskilled and semi-skilled jobs in industry and the public services. In relation to engineering in Coventry the pattern established during this time was that whites came to take up the skilled jobs that they had always held and '...new skilled jobs were snapped up by white workers.' (Landa and Simmons:1981,p.4) in the boom conditions in Coventry in the 1950s and 1960s. Immigrant blacks filled vacant semi and unskilled jobs. But even in these conditions blacks had difficulties getting jobs in the City. There were informal colour bars on blacks obtaining skilled jobs and promotion, the Coventry Employment Exchange practised open discrimination and at Alfred Herberts, one of the largest engineering firms in the City, '...a formal code restricted the grade of work that immigrant workers could perform.' (ibid.p.5). It was in the 1950s and 1960s that the roots of racism in engineering in Coventry first developed. These material practices established a framework within which discrimination at work has persisted '...to the present day in engineering.' (ibid.) in Coventry.

This explanation would need to be developed further through systematic historical research. In particular, it would be useful to research black people who arrived in Coventry in the 1950s and 1960s, especially those who worked or tried to work in engineering in the City, and Coventry employers who were recruiting at that time, to examine the reciprocal relationship between the practices and events outlined above and the formation of the idea amongst the City's employers that certain racial groups were best suited to certain types of work. But this is another project, a possible extension of the thesis.

(iv) Discussion: A Material Basis for Discrimination?

This chapter has demonstrated that sex and race figured as recruitment criteria for CEES employers. In general, white male applicants were preferred. But this raises certain problems in relation to previous findings on attributes sought in applicants in Part Two.

First, in Part Two, it was discovered that CEES employers did not specify that white male applicants were required. Secondly, from the criteria of recruitment examined in Part Two, with the emphasis on work attitudes and personality traits, there was no real basis for excluding blacks and females qua blacks and females. On the recruitment of girls specifically, it was found in Chapter Six that physical qualities were relatively unimportant, so that employers who argued that girls were not strong enough were on weak ground according to their **own criteria**.

One way of interpreting the data on race and sex which is consistent with the general findings on the importance of work attitudes and personality traits is to see black and female apprentices as being deficient in these. But this is inadequate as the CEES employers were quite happy to employ blacks in semi-skilled jobs and young women in clerical jobs (and even as technicians in the larger firms). Hence, the proposition only makes sense in relation to those work attitudes and personality traits that were specific to engineering apprenticeship recruitment. On both of these it is virtually impossible from the CEES to isolate which of the work attitudes and personality traits were specific to engineering apprenticeship recruitment as opposed to recruitment to other youth jobs in engineering - comparative studies on the recruitment of office juniors, trainees and other categories of young workers in engineering were not carried out. Even work attitudes such as interest in engineering, which were examined in Chapters Eight and Twelve, might also prove to be attributes sought in relation to the recruitment of other groups of young workers in engineering. Comparative studies of different groups of young workers in engineering along the lines of the CEES would be required. Finally, one would need to study the work attitudes of applicants to engineering apprenticeships to discover if there

were any differences between male and female, and black and white applicants on those work attitudes and personality traits that were given specific importance by engineering employers in apprentice recruitment.

All this might prove nothing. It was discovered that in relation to test scores and qualifications the employers' formal criteria seemed to work differently for females and blacks as opposed to white males. White males would be taken on in certain circumstances when they had blatantly appalling qualifications and test scores. Blacks and young women on the other hand had to pass the tests and meet qualifications requirements before they would be considered. CEES employers often used the argument that black and female applicants had fallen short in these areas as explanations of why they had so few or no blacks and women as apprentices. Given the deep-seated prejudices against taking women as apprentices in the smaller CEES firms it would be surprising if any were taken on **however** good their qualifications or test scores were. Likewise work attitudes and personality traits. In at least five firms in the CEES female apprentices were an untenable proposition. These were the firms that actually admitted it, although from the answers of some of the others the real number was much higher. Thus, no matter how good the qualifications, test scores, work attitudes or anything else of female apprenticeship applicants were, the result would be the same - no apprenticeship.

The argument that young blacks and women were lacking in certain key work attitudes and personality traits is ultimately as much use as saying that they did not get jobs as apprentices in engineering because they had poor qualifications or test scores. The argument runs up against four facts thrown up from the CEES; first, white males were taken on with inadequate test scores and qualifications on **employers' own criteria**; secondly, white males were recruited with poor work attitudes, especially a lack of interest in engineering (Chapter Twelve); thirdly, white males who had poor qualifications, tests and work attitudes were sometimes taken on because of **who they were**, (relatives of directors/managers/owners, relatives of workers), rather than the particular attributes they possessed; fourthly, there were firms which did not take on young blacks or young women as

apprentices just because they were black and female - work attitudes, qualifications, everything - went by the board. The explanations given by CEES employers as to why they had so few or no young women or blacks as apprentices were inconsistent with the advantageous treatment of white male applicants who were recruited without a number of attributes or indicators of attributes cited as being missing in black and female applicants. Double standards were in operation. The recruitment channels used in some firms, especially small group A-B firms, discriminated against both young women and blacks. Courtenay (1980) in her research into the Coventry labour market reported that Asians and Afro-Caribbeans were less aware of and locked into the informal networks regarding job vacancies than whites. They were more reliant on formal job-finding agencies. Whilst Keil and Newton (1980) found that girls were less likely to enter apprenticeships through family or friends than boys. Again, formal agencies and newspapers played a greater role. Thus, where firms were using restricted recruitment channels this indirectly discriminated against young women and blacks.

It is important to grasp the nature of sex and race as recruitment criteria. Sex and race are not labour power attributes. They cannot and are not generally socially produced as labour power attributes, (except in debatable examples where people have sex changes or skin coloration therapy backed up with plastic surgery to aid their careers). In recruitment they are taken as given, but nevertheless feature as recruitment criteria, as hidden criteria and not as attributes sought in applicants as expressed in statements of what employers are looking for in applicants. Avis (1981) has argued that capital is indifferent to the age, gender or race of workers. From the capitalist viewpoint the issue is the quality of labour power, the quality of its particular attributes, not whether it is old/young, black/white or male/female. Yet employers obviously do use age, sex and race as recruitment criteria. Cockburn (1987) has argued that in relation to the sex of applicants, recruiters, typically male, do not act as 'pure' capitalists looking for the best possible labour power, but act '...more like their male employees: on masculine prejudice and preference.'(p.4). She points to studies which show blatant sex and race discrimination in recruitment

(ibid.pp4-5). The implication here is that recruiters as agents of capital are being irrational in terms of the labour power they recruit as such discrimination may well mean that they do not recruit the best possible labour power as they brush aside better quality blacks and females for poorer quality whites and males. Anarchy, not capitalist good sense, reigns in the recruitment process. The official view of the human capital school is that such practices will eventually die out as those capitalists that recruit according to a preference for males/whites over females/blacks would be at a competitive disadvantage compared with those that recruited on the quality of labour power of applicants (Blackburn and Mann:1979; Hohn:1988). This does not appear to be happening. Discriminatory recruitment is as old as capitalism and it is difficult to pinpoint firms going bankrupt because of it. From the capitalist viewpoint how can it be explained in terms of **labour power policy**? Three main conclusions are possible. First, it may be the case that for those firms who do discriminate the economic penalties are not very great, and hence they can continue to do it. Secondly, it may be the case that as so many discriminate in recruitment the relative disadvantage to be suffered from it is negligible; there is a general anarchy in the recruitment process resulting from recruitment through the utilisation of age, sex and race criteria. Thirdly, there may be benefits in using age, sex and race as recruitment criteria - capitalist recruiters using them are not being irrational, the recruitment process is not essentially anarchic on this issue and labour power considerations are to the fore. It is this last possibility that will be considered here as it throws up some pertinent issues in relation to the thesis. In particular it raises the possibility of an aspect of labour power not analysed in Part Two of the thesis; the collective aspect. The work of Hohn (1988) is paramount. Hohn (1988) addresses the issue of the rationality of recruiters in taking race and sex and blood ties as recruitment criteria. His novel and provocative approach to the issue of discrimination in recruitment touches on points examined in Part Two, especially the relation between different labour power aspects. It is provocative, as, if it is right, it provides a material foundation for racism, sexism and ageism which is based in the

immediate process of production itself - and not on the supposed irrationality of recruiters in the labour market. It could easily be used to justify racist, sexist and ageist recruitment policies and to recruit from the families of employees. Hohn's work has tremendous implications, only some of which can be examined here.

This work was based on research into the recruitment process in Britain and West Germany and the conclusions Hohn reaches are based on findings from interviews with personnel managers. Hohn starts with conventional economics and notes that:

'The model of selection and recruitment that has been worked out by economists maintains that discrimination on the grounds of sex, family background, marital status or personal relationship will be eliminated by market competition. In the long run the firms that discriminate, for instance, against women or black workers have to bear higher costs and are likely to disappear from the market.' (p.83).

These higher costs resulted from taking on poorer quality workers (involving more supervision, less production) than was necessary through overlooking workers who were superior in terms of labour power attributes but happened to be the wrong colour or sex. However, argues Hohn, what these conventional economists have failed to see is that the firm is not just a production process requiring 'technical skills to solve technical and organisational puzzles' (ibid.), but it is also:

'...a social organisation of workers who share common values, are integrated into social networks, and are more or less motivated to contribute to the various purposes of the firm.' (ibid.pp83-84).

Leaving aside the issue that workers may not share common values, Hohn's next step is to argue that:

'Selecting applicants on grounds of sex, race or age is usually regarded as 'discrimination' which is not grounded in productivity differentials. The analysis of the interviews with personnel managers shows that they argue from the point of the view of the survival of the firm. A well-integrated workforce is one of the crucial assets for the success of the firm. Professional recruitment has to make sure that the newcomer fits into the working group. From the point of view of the firm this kind of selection will be efficient in so far as it strengthens the social coherence of the workforce.' (p.85).

On this analysis it makes sense to recruit white-only workers if it is held that this will strengthen this social coherence. If females and male workers do not mix well then they must be separated and different jobs, sections or whole workplaces become sex-specific. The essential point is that new workers fit in; this key social attitude examined in Chapter Eight becomes the lynchpin of Hohn's analysis. Thus, if the white workers within a firm are racist and do not like working with blacks, from the point of view of **production** (not any irrational prejudice on the part of the recruiter), it makes sense to keep blacks out. Indeed, Hohn argues this point himself in relation to guest workers in Germany. He notes the reluctance of German workers to work under foreign supervisors, and he gives an example of a firm where the workers were against the promotion of a Turkish worker. Hohn concludes from this that:

'From a purely economic standpoint, the failure to utilise existing human capital may seem irrational...[but the]...reason is not that the foreign workers are less productive, as is often maintained of young workers and older workers. The discrimination against foreign workers is due to cultural factors. It is not the problem of an 'objective' standard of productivity but the expression of a political battle, fought on the basis of cultural resources, to decide which group shall have a monopoly of certain social goods.' (p.101).

Here Hohn changes his argument. Formally he had argued that the social coherence of the workforce affected production, and that where workers of a particular type (race, sex, age, no doubt even appearance and political views also) affected this coherence such that the existing workforce were loath to work with them then it made economic sense not to employ them. Here, however, he switches to a more conventional stance, that groups of workers struggle over jobs, and those in work will try to keep those out whom they personally dislike. This battle is fought with unspecified cultural resources. However, later in his (1988) Hohn reverts back to his original position. Why are employers reluctant to employ women in a male dominated workplace? Hohn's answer is that:

'...in many places the attitude persists that in a male domain women cannot be recruited because they would be difficult to integrate.' (p.111).

He moves back to the position where the homogeneity of the workforce affects its productivity. The Medco example from the Pilot Study readily springs to mind here; women on the shopfloor in engineering were a disruptive force when they worked with men. They undermined the social coherence of the workgroup and caused time-wasting according to the Medco interviewee.

Hohn's work points to the existence of a collective aspect to labour power which has important consequences for the aspects of individual labour power analysed in Part Two. As well as the quality of individual labour powers within a capital, the quality of co-operation between these individual labour powers is a crucial force in the labour process. Labour is not just an isolated act of individual labour powers but involves co-operation between workers. The summation of this co-operation is the collective aspect of labour power. The ability of labourers as individuals within the collectivity to integrate with other workers affects this collective aspect of labour power. If there are workers who are disliked or are deemed to share different values to the majority of workers then this may lead to difficulties of workers not wanting to work with them, tell them things - in fact generally co-operate with them - in the labour process. The social coherence of the workgroup is affected and labour power as a collectivity, labour power as a total of all the individual labour powers within a capital, will be diminished as a social reality and this will affect the overall level of co-operation in the labour process and then production. Thus, the capitalist will recruit and aim to socially produce labour power that will fit in with the existing workforce. On the other hand, from the point of view of the collective aspect of labour power, those applicants for jobs who are viewed as relatively bad risks in terms of fitting in with the existing workforce will be shunned. A compromise would be to put different types of workers by age, sex and race into different levels of work and in workgroups where the level of co-operation required is relatively low as between different sections of the workforce. This encourages and provides a material foundation for sexual, racial and age segmentation. It is what Hohn's analysis leads to, although he does not systematise it to this extent, or of course use the concepts developed in the thesis.

However, one of the implications of Hohn (1988) is that the collective aspect of labour power is the most important. Only if this is so could it be argued, as he himself does in fact argue, that employers are not being irrational when they reject apparently higher quality applicants on sex, race or age grounds in favour of a lesser quality applicant in terms of labour power attributes, but who happens to be the right sex/age/race to fit in with the workers s/he will be immediately working with, or the workforce as a whole. What Hohn implies is that the collective aspect of labour power rules in recruitment and labour power policies, and for good reason.

Before arguing against this view it is important to make certain issues clear. First, the subjective aspect of labour power, which is an aspect of the individual labour powers, is organically related to the collective aspect. If there are workers within the labour process with whom other workers may not wish to work this may ultimately come to affect the willingness of the former to subsume their wills within their individual labour powers, affect their willingness to work, especially if they have to work closely with the 'undesirables'. We saw this in the CEES where it was argued by technician recruiters that draughtsmen would not like working with punk technician apprentices. Hence the latter were shunned in recruitment. From this viewpoint it makes sense to give importance to the effect applicants will have on workers as individual workers also as well as the whole collectivity of workers. The collective aspect of labour power is undermined partly through the subjective aspect; not only is the overall level of coherence of collective labour power affected to the extent that individual workers cannot be integrated within the whole workgroup, but the subjective labour power aspect of individual labour powers may be affected especially as they have to directly relate to other individual labour powers through the person of the labourer in the labour process. Put simply, workers might not like working with certain individuals relative to others and this may affect their output. Secondly, the social production of labour power may be affected if the collective aspect of labour power is not given enough regard. This applied especially in the smaller firms in the CEES where on-the-job training was an important feature and required the co-

operation of skilled workers. Employers argued that if the skilled men did not like the apprentice, because s/he was too cocky or a 'know-all', then they would not train the youngster willingly.

Finally, age differs from race or sex in relation to the CEES in particular. The rate-for-age system constrained employers to take on apprentices of a certain age in a way they were not constrained to take on applicants according to their sex or race. Thus, the crucial arguments concern the latter where employers could make a relatively 'free' choice in recruitment not tied down by immediate financial considerations.

Ultimately it makes no sense to argue, as Hohn seems to be arguing, that the collective aspect of labour power is in command. Empirically it makes little sense. The social attitudes sought in applicants in the CEES outlined in Appendix 7 (not just the ability to mix and fit in) reflect the collective aspect of labour power. They are attributes which impinge on the coherence of the workforce, the quality of co-operation within the worker collectivity in the labour process and co-operation between individual workers. It is these attributes that are particularly affected by the recruitment of workers unlikely to fit in well with the current workforce. Yet we saw that employers rate work attitudes and personality traits above social attitudes. Hence, it could be argued that as labour power attributes the former were more important. On this analysis, in the recruitment process it would not make sense to reject a black applicant who had better work attitudes than a white taken on in their stead just because the latter would more easily fit in with the existing white workforce. In terms of the attributes actually sought by CEES employers it would be an irrational thing to do. Thus, given the overall importance of work attitudes established in the studies referred to in Chapter Six, where employers were taking on recruits first of all on sex and race and disregarding work attitudes and personality traits then they were being irrational, not rational as Hohn has it, on the basis of the relative importance of the various classes of **employers' own recruitment criteria**. Rather than showing 'rationality' through recruiting whites over blacks through attempting to secure a higher level of workforce integration and hence raising the level of co-operation and the collective aspect of

labour power, such employers were flying in the face of their own labour power priorities. Further anarchy was introduced into the recruitment process rather than rationality.

There is a possible objection to this argument. Blackness/whiteness or femaleness/maleness are not labour power attributes, as was argued earlier. Race and sex figure as recruitment criteria. Thus, it could be argued that where employers were taking on applicants using sex and race criteria, this cannot conflict with any labour power attributes specified by employers. Consideration of the sex and race of applicants in recruitment hence has nothing to do with labour power policy directly as capital is sex and race blind in terms of labour power. This objection screens certain distinctions made earlier. It was argued that labour power attributes figure as a class (the dominant class) of attributes sought in applicants. The latter in turn figure as recruitment criteria; they are inscribed within the recruitment criteria. But there are other criteria of recruitment (such as sex and race) which do not figure as attributes sought. Sex and race tend to figure as largely unspecified, hidden and assumed criteria of recruitment. As attributes sought in applicants in the CEES sex and race did not figure at all. The issue for Hohn is not that females and blacks have poor labour power attributes, specifically poor social attitudes and particularly the ability to mix and fit in, but that in white male dominated areas of work the established workers will not want to work with them and hence the integration of new black/female recruits into the workgroup will be affected and in turn this affects the capacity of the workgroup to function as a collectivity. The key question then is whether work attitudes and the other categories of attributes sought in applicants, **as recruitment criteria**, were more important than sex and race as recruitment criteria. The CEES did not give any definitive answers to this question. The Apprentices' Study came across examples of white male youth with apparently poor work attitudes and low test scores. These were typically employees' and employers' sons/relatives/friends or had someone sponsoring them to give them an advantage in recruitment. No blacks or females were recruited like this in the Apprentices' Study. But this is not the issue. The issue is whether

employers recruited young people in general, without these blood and friendship ties, on sex and race rather than work attitudes and other classes of attributes sought in recruitment. The CEES and the Apprentices' Study suggests that they did. Further, more direct, research on this issue is required to ascertain the extent to which employers were taking on young recruits on sex and race irrespective of work attitudes and other classes of attributes sought in applicants which were specified and formerly stated.

Assuming that some employers were recruiting young people on sex and race over and above all the classes of attributes sought in applicants in Appendix 7 what are the implications? The main implication would be that these recruiters were either just prejudiced, in which case they were being irrational by ignoring the possibility of there being better applicants than the ones they took on the basis of sex or race, or they discriminated for a material reason - to enhance the integration and hence the collective aspect of their labour power. But it makes no sense to put the collective aspect of labour power in command in recruitment. Recruiting whites males over blacks and females with better work attitudes, personality traits, general abilities, learned skills and physical qualities suggests an undue emphasis on the collective aspect of labour power. Of course, it depends on the differences between the work attitudes, personality traits, learned skills and physical qualities. At this point Hohn's perspective makes more sense. Where work attitudes and personality traits (classes of attributes sought in applicants deemed to be more important than social attitudes in the CEES) were roughly equal then taking sex and race into account would make sense, but only if the workforce were in fact racist and sexist. Hohn's conclusions presuppose a substantial degree of racism and sexism in the working class and only make sense on this basis. But the labour power policies that Hohn says employers follow where racism and sexism is to the fore, in segregating workers along race and sex lines, exacerbate and reinforce racism and sexism.

Secondly, it could be argued that where the existing workers have social attitudes which only gain effectivity in relation to certain new recruits which reflect their own sex, race, values, orientations to life or whatever

- that these workers will co-operate with new recruits only when they want to or do so reluctantly, or without enthusiasm - this ultimately places a limitation on the employer concerning the type of worker he wants to take on. If the employer is not a racist and would recruit black workers if their labour power attributes were better than white applicants, yet had to take the racism of his workers into account in recruitment in order to ensure the integration of new workers into the workgroup, then from the employers' point of view it could be argued that her/his workers had **relatively poor social attitudes**. They would only allow certain people to integrate with them. Standing Hohn's argument on its head, the problem from the employer's viewpoint is the poor quality of the social attitudes of her/his workers places undue limitations on the type of person s/he can recruit.

What Hohn ultimately does is to overemphasise the collective aspect of labour power and argue on the basis of his research that it takes priority over other aspects. If employers did place top priority on the collective aspect of labour power and recruit firstly on whether new recruits would integrate with current workers it would mean yielding a significant amount of indirect control over recruitment to the current workforce. New recruits must not run up against the prejudices and values of the current workforce. From the capitalist point of view what this shows is that where workers are reluctant to integrate with new recruits, where the social attitudes of these new recruits are of a relatively high quality, then this suggests that the current workforce have **relatively poor social attitudes**. They will not try, or feel incapable of, fitting in with the new recruit. The employer will not sack his workforce on this score, as in other respects (work attitudes, learned skills) they may be relatively good. It is easier not to let those in which are not to the liking of current employees. Only if this state of affairs is given does discrimination in recruitment on sex and race criteria, racial and sex discrimination in recruitment, have a material foundation. Only if the racism and sexism of the current workforce is taken as a given starting point in recruitment by the employer does it then make sense for her/him to recruit on race and sex criteria. For employers it is ultimately against their interests to accept this situation as it undermines

their control regarding who they can recruit. But they are unlikely to fight it with vigour through fear of upsetting the general industrial relations climate. Managements may also see industrial relations benefits in having a divided workforce. Hohn's work can be read as justifying racial and sex discrimination in recruitment as under given conditions it shows a material basis, good capitalist reasons, for such discrimination. The critical analysis of this work suggests different conclusions: it shows that the recruitment process in capitalism, which is about assessing labour power attributes first and foremost (even on the employers' own statements of their 'needs', the attributes sought in applicants), has tendencies to become anarchic and also racist and sexist as the consideration of labour power attributes takes a back seat to prejudice and reaction and factors unrelated to the assessment of labour power.

The next chapter is the first of two short concluding chapters which summarise the central arguments, work out their main implications and suggest further areas of research flowing from the thesis. It is shown that the thesis throws up a peculiar set of findings. These become less peculiar when viewed through the general and specific arguments of the thesis and key concepts developed in the thesis.

P A R T F I V E

[SUMMARY OF ARGUMENTS AND CONCLUSIONS]

**Summary of Arguments - Implications - Suggestions for Further Research -
Underdeveloped Issues in the Thesis - Conclusion**

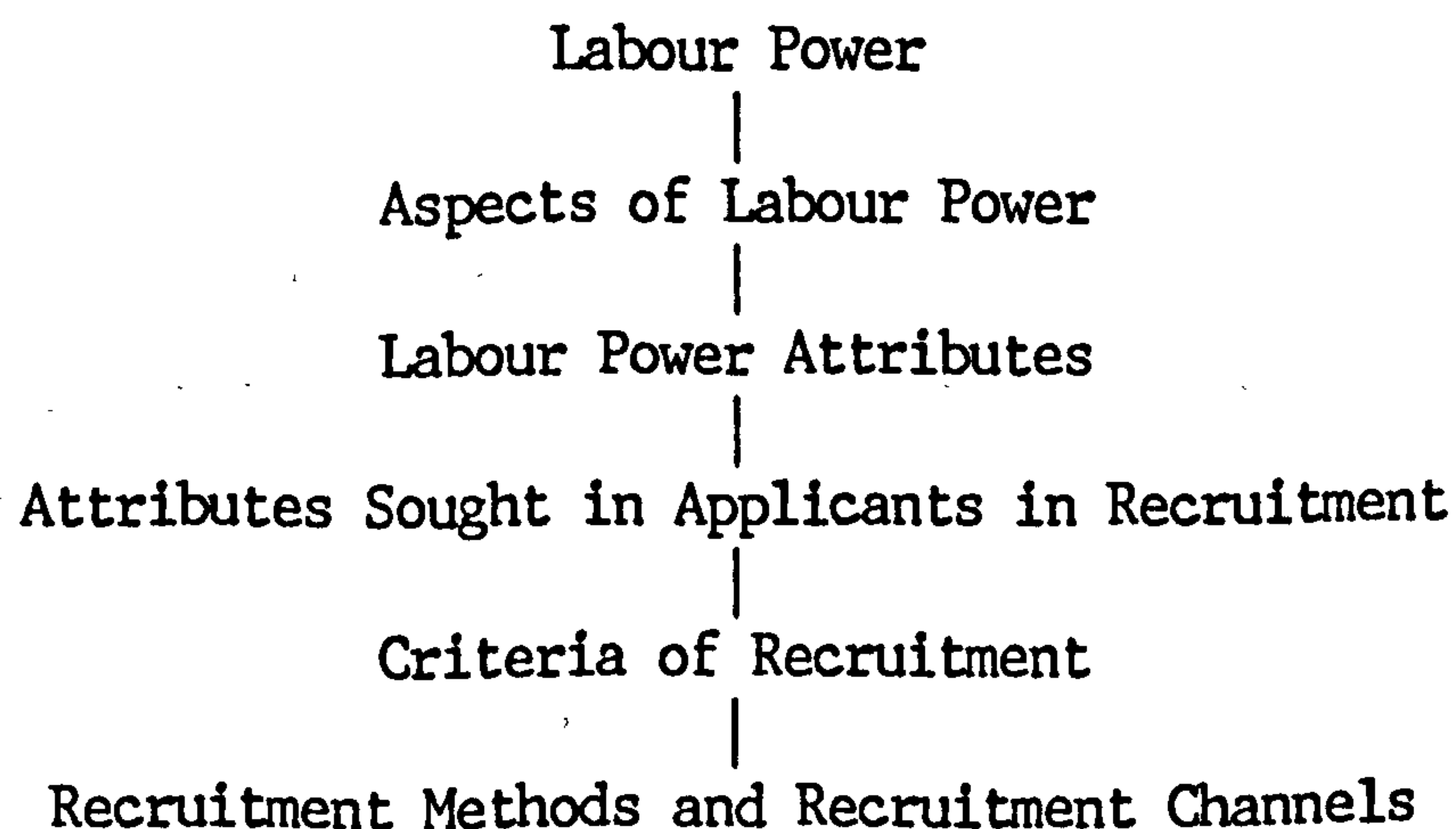
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Chapter Twenty-threeA CURIOUS SET OF FINDINGS - THE GENERAL ARGUMENT ARISING FROM THE EMPIRICAL WORK

This chapter deals with the main finding thrown up by the CEES, the dominance of work attitudes amongst the attributes sought in applicants in recruitment, and a curious, apparently contradictory, set of findings related to the dominance of work attitudes. Chapter Six showed that work attitudes accounted for 30% of all weighted related references to attributes sought in applicants for engineering apprenticeships. The next most important class of attributes, personality traits received only 16% of weighted related references. The dominance of work attitudes was a general phenomenon requiring a general explanation as other studies had also reported it in relation to a variety of youth labour markets. No such general explanation was thrown up by the empirical work taken as a whole. Neither was the literature very helpful in explaining the dominance of work attitudes. It was necessary to develop a set of distinctions, concepts and specifications to enable understanding of the dominance of work attitudes as attributes sought in applicants in recruitment. Figure 23.1 shows these diagrammatically on the basis of how abstract/concrete they were.

Figure 23.1 : KEY DISTINCTIONS, CONCEPTS AND SPECIFICATIONS DEVELOPED IN THE THESIS AND THE RELATIVE EXTENT TO WHICH THEY WERE ABSTRACT/CONCRETE

ABSTRACT



CONCRETE

These concepts and distinctions have been examined in great detail in the

thesis: Labour power is explored in Chapter Two; aspects of labour power in Chapters Two, Six and Twenty-two; labour power attributes in the Introduction, Chapters Two and Six; attributes sought in recruitment in Chapters Six and Seven; the criteria of recruitment in Chapter Six; and recruitment methods and channels (and how they relate to recruitment criteria) in Chapter Thirteen, Section (i). Some essential points about these concepts and distinctions require restatement and final clarification.

First, the discussion of labour power in Chapter Two established that work attitudes and personality traits could be seen as labour power attributes, as what Marx called 'mental capabilities' whose aggregates along with 'physical capabilities' constituted labour power on his definition. This discussion was about what could be included under mental capabilities or capacities. In Chapter Seven it was also argued that certain social attitudes could also be included. Thus, the way labour power was viewed in the thesis was unorthodox.

Secondly, aspects of labour power are labour power viewed from particular perspectives in relation to the labour process and the valorization process. They are one-sided abstractions. Four aspects were examined in particular: the subjective aspect of labour power (which emphasised the relation between the person, the possessor of labour power as an independent will, and the labour power belonging to the person); the use value aspect (which related to the active, creative side of labour power, its qualitative aspect, as it is used to create use values); the exchange aspect (which relates to the quantitative side, to valorization, where attributes relate to speed, reliability, work discipline and the general grind of valorization); and finally the collective aspect of labour power (which relates to how different labour powers co-operate as a unit, as a collectivity). In brief, the aspects relate to the individual/collective, and use value/exchange value dichotomies. The crucial point about these aspects, as Chapters Six and Twenty-two argue in particular, is that they come into antagonistic and contradictory relations with each other as aspects of particular labour powers and as part of collective labour power.

Thirdly, labour power attributes are the individual items, the individual capabilities and capacities that constitute labour power. The very stuff of labour power. They are inscribed in and dominate the attributes sought in applicants in recruitment. In the orthodox terminology, statements of employers' needs in terms of what they look for in applicants are dominated by labour power needs; the needs of industry are basically statements about labour power needs. Labour power attributes can be viewed from three perspectives which must be made clear in use. Firstly, they can be viewed as actual attributes of labour power as utilised within the labour process. Secondly, they can be viewed as attributes to be socially produced and related to the social production of labour power, and thirdly, as attributes assessed in labour power in the recruitment process - the extent to which particular applicants have specified attributes developed within their labour power. From all three perspectives, (though to varying extents), labour power attributes are regulated by the labour process.

Labour power attributes are inscribed within attributes sought within labour power in recruitment. The latter include attributes which are not directly to do with the labour power under consideration in recruitment. Some attributes sought relate primarily to the applicant's family life, the quality of her/his reproduction for example (Chapter Eleven). The attributes sought in applicants are the full list of what employers look for in applicants. Chapter Six examined the main classes of attributes sought in applicants in recruitment.

However, this list is not necessarily equivalent to the criteria of recruitment. These are all the considerations, those formally stated as attributes sought, those hidden, unstated criteria (such as sex and race) and other criteria not connected to the person which condition whether particular applicants are recruited. Recruitment methods are basically about gauging the quality of attributes sought in applicants, and especially labour power attributes. Recruitment channels are the ways in which applicants and employers are brought together (advertising, the Careers Service, MGTS and so on). The recruitment process refers to recruitment

criteria, methods and channels.

It was argued in Chapter Six that the importance of work attitudes flowed from the subjective aspect of labour power. Learning in the social production of labour power and actual labour in the labour process are fundamentally conditioned by the extent to which the subjective, active and wilful aspect of labour power becomes subsumed within, identifies and participates in its own social production and work in the labour process. The extent to which this occurs conditions both the ease with which labour power is socially produced and in which it labours in the labour process. For the employer this expresses itself in the worker's attitudes to work. This is how the employer understands the process. Thus, to the extent that the labourer does not identify with the work, refuses to subsume her/his will within her/his own labour power, then her/his will becomes recalcitrant and hostile, and then this is viewed as a case where the worker has poor work attitudes and requires above average supervision, and has to be 'kept at it'. From the employers' perspective work attitudes are the crucial attributes as all the rest depend on them. The ease with which all the labour power attributes within the labourer's labour power come together and result in labour depend first on work attitudes, which in turn depend on the extent to which the labourer's will is subsumed within her/his labour power. A subsidiary explanation of the importance of work attitudes given in Chapter Six was that it partially results from the underdevelopment of the social production of labour power. In particular, the underdevelopment of work attitudes, but also personality traits and social attitudes as labour power attributes. However, it was also argued (in Chapter Two) that since the character training schemes of the 1950s and especially since the rise of YOP and YTS, there has been a more determined effort to produce these as labour power attributes.

These general arguments which address the importance of work attitudes were supplemented by a specific contextual one in relation to the recruitment of engineering apprentices in Coventry. The CEES employers, especially craft recruiters, tended to view attitude to work in a specific engineering-oriented way. The particular form that the dominance of work attitudes took

in the CEES was conditioned by the constrained and constricted nature of the Coventry youth labour market. Given the structure of the youth labour market in Coventry, and the recession of the early 1980s, it was no surprise that young people drifted into engineering who were not interested in working in engineering. There was a real crisis of interest in engineering in Coventry (Chapter Twelve).

The dominance of work attitudes in attributes sought in applicants for engineering apprenticeships in Coventry was problematic, to varying degrees, in relation to other findings in the CEES. Taken as a whole these findings constituted a curious set of findings. First, there was the fact that appearance was the single most important attribute sought in applicants. But this could easily be accommodated within the logic of the findings as it turned out that appearance basically functioned as an indicator of work attitudes for the CEES employers. It also functioned as an indicator of social attitudes such as the ability to fit in. Secondly, CEES employers took on apprentices who did not come up to their qualifications criteria (Chapter Nine). But this fact too could be accommodated as it could be argued (and some employers did in fact argue this) that as work attitudes were more important than qualifications, then if an applicant had good work attitudes but was not up to scratch on qualifications s/he would still make a good apprentice and would be taken on. Nevertheless, this argument was stretched to the point where only 47% of apprentices in the Apprentices' Study got qualifications which met both the criteria of the MGTS and their own employers. This fact threw a question mark against setting every empirical point against the dominance of work attitudes. This showed itself in a third set of facts.

When employers were asked how schools could more adequately prepare young people for apprenticeships in their firms they argued in terms of concentrating more on **learned skills**, especially the 3R's, as opposed to work attitudes. Thus, what they expected of schools ran counter to their own priorities in recruitment. But as it turned out there was an explanation of the emphasis on the 3R's which was compatible with the dominance of work attitudes. This explanation rested on the CEES employers' views on the

relation between general education and practical education and training. First, employers did not expect much of schools in relation to raising the quality of work attitudes. They argued that given what teachers were up against (opposition from parents to corporal punishment in particular), then the necessary discipline could not be established. Given this, they often turned to see if applicants had done part-time jobs or had belonged to the Scouts or the Boys Brigade. The former showed that they had well-developed work attitudes and the latter showed that applicants had been subjected to the type of discipline that mirrored the tough discipline they imposed on apprentices. Secondly, in general (with a few dissenting voices from small firms who wanted schools to do some engineering training in the last years), employers viewed schools as being about general education, and particularly the basics, the 3Rs. This was what schools ought to provide and this was where they were failing, although when it came to specifying on which particular numeracy skills schools had failed, which numeracy skills had deteriorated, there was a general vagueness. Schools then were not expected to raise the quality of work attitudes and hence there was no inconsistency between work attitudes being the most important attributes sought and the employers arguing that schools should concentrate on the 3Rs. But there was another contradiction involved. How would schools raise the quality of the 3Rs if they could not raise the quality of discipline and were not expected to be in a position to raise it? The employers argued that discipline was the basis of learning and work. If this was so, and teachers were not in a position to raise the level of discipline, then how could they be expected to raise the level of the 3Rs? There was a contradiction between what they demanded of schools and what they expected of them.

A fourth set of findings was even more anomalous. On the one hand, CEES employers seemed willing to take on some young people (sons/relative and friends of employees, sons of employers/directors and top managers, and customers and clients sons) almost irregardless of their work attitudes, learned skills or anything else much, and on the other hand, not allow girls especially, but also young blacks, as apprentices no matter how good their work attitudes, qualifications or any other attributes were. For some young

people work attitudes were not the paramount consideration. There were no considerations - they were just not wanted. Large firms were less prey to this anomaly than the smaller firms, but the CEES threw up examples of large group E firms who exhibited this tendency. The next chapter examines this anomaly in detail and argues that it manifested the basic anarchy of the recruitment process, where young people were not just recruited on the quality of their labour power attributes, but on ascriptive criteria and friendship and blood ties. Furthermore, the distinctions, specifications and concepts in Figure 23.1 were not just developed in relation to answering why work attitudes were dominant as attributes sought in applicants for engineering apprenticeships, but were partly devised as a non-functionalist alternative to the vocabulary of the 'needs of industry' which is the focus of the next chapter.

Implications

The central implication of the above is that labour power is necessarily a contradictory phenomena as it reflects contradictions within the capitalist labour process. Aspects of labour power are organically related to the labour process and the valorisation process and hence come to reflect the contradictions within these, although the precise forms that these take and the concrete ways they are encountered and manifested will vary according to considerations outlined in Chapter Six, Section (viii).

Secondly, as it was argued that labour power attributes dominated the attributes sought in applicants this implies that the CEES firms were keeping their labour processes in view when they considered what they were looking for in apprentices. But this did not apply when they had a female applicant before them, or, to a lesser extent, a young black applicant. This point will be expanded in the next chapter.

Thirdly, the specified relationship between the structure of the youth labour market and the propensity of CEES employers to refer to specific work attitudes in the attributes sought in applicants implies that there was possibly a general relationship between the youth labour market and the type

of work attitudes sought by employers. Thus, it would seem that where there was a relatively constricted youth labour market this would lead to employers placing a correspondingly high emphasis on specific work attitudes amongst attributes sought. Where the youth labour market was relatively open, with a wide spread of industries, then it could be expected that general work attitudes would be more to the fore. This remains a hypothesis.

Fourthly, a further implication is that employers do not always act in terms of their own stated priorities in the recruitment process. Put in the orthodox terminology; they do not always recruit to their stated needs. For some groups of young people, especially girls, they ignore their own statements of attributes sought and reject on openly ascriptive grounds. This point shows that their own labour power policies were ultimately anarchic and unprincipled. This point is developed in the next chapter.

Suggestions for Further Research

One area for further research would be to follow up the hypothesis that the form that the dominance of work attitudes takes is regulated by the structure of the youth labour market. One possibility here is that given a very open youth labour market work attitudes may cease to become the dominant class of attributes sought altogether. Cuming (1983) found that for some industrial groups, especially the financial, professional and scientific group, work attitudes were the least important class of attributes sought. Theoretically, what implications does this finding have for the general argument advanced above concerning the importance of work attitudes and the relation of work attitudes to the subjective aspect of labour power? These points need further development.

Chapter Twenty-fourSUMMARY OF ARGUMENTS ON THE NEEDS OF INDUSTRY, SOME UNDERDEVELOPED THEMES AND ISSUES, AND CONCLUSIONS(i) Introduction: The Needs of Industry

This chapter concentrates mainly on the three interconnected arguments concerning the needs of industry in the thesis. One of these argument was essentially conceptual, one theoretical in nature and the final one basically empirical. Before examining these three arguments it would seem opportune to consider why they were developed, what they were responses to.

The needs of industry was a concept which rose to prominence in the mid-1970s with the Great Debate on education and work initiated by James Callaghan (1976). However, it gradually gained a wide currency in the literature of what was labelled as the new transition from school to work (Chapter One). Given its drift into academic usage it received some critical analysis in the late 1970s and early 1980s. In recent years such critical analysis has almost ceased, yet the concept is widely used and largely unspecified. What types of needs were the 'needs of industry'?

There were also empirical claims made in relation to the needs of industry. Firstly, it was argued that employers sometimes did not know what their particular needs of industry were (Chapter One). Secondly, it was claimed that insofar as they could specify their needs they often did so in a contradictory and ambiguous manner. These empirical claims concerning the needs of industry received scant explanation. It was this fact that inspired me to research the needs of industry concretely through a study of the recruitment of engineering apprentices (Chapter Three). I wanted to see for myself whether employers were bone-headed, indecisive and ignorant concerning their needs to the extent that the literature suggested. Empirical study was held to be essential here.

A further point was that analysis of the literature on the needs of industry showed that basic errors were being committed. First, analysts and

researchers tended to jump around between levels of analysis, talking about the needs of capital in general and individual capitals as though this did not matter. Secondly, there was much confusion between needs as operationalised in recruitment criteria and the requirements of the labour process. In terms of the conceptual framework developed in the last chapter, there was confusion between labour power attributes as utilised in the labour process and labour power attributes as assessed in recruitment. On the whole then, arguments and claims about the needs of industry seemed to be confused and inadequate from a conceptual, theoretical and empirical point of view. The following sub-sections present the main arguments of the thesis concerning the 'needs' of industry. After Section (ii) the concepts developed in the thesis take over. In Section (v), some of the underdeveloped issues, themes and concerns of the thesis are briefly examined. The final Section (iv) is the General Conclusion of the thesis.

(ii) The Needs of Industry: The Conceptual Argument

This argument concerns what the concept actually refers to. In Chapter Two it was argued that its basic referent was labour power. The needs of industry were basically about labour power needs, the capacity to labour in the labour process, especially the attributes that were needed within labour power for efficient work in the labour process.

It was argued that this could be seen in employers actual statements of their needs. It could also be seen in the debate about employers' needs in the literature, and finally in frameworks that a few theorists and researchers had developed for the analysis of and research into the needs of industry (Chapter Two).

However, it was argued that the notion of needs in relation to labour power was essentially incoherent (Chapter Seven). First, these needs could not be specified in relation to the quality of labour power attributes to be socially produced or assessed. Secondly, statements of needs were predicated on contradictions within aspects of labour power. What the capitalist ultimately 'needed' was the resolution of these contradictions. But this was

an impossibility as no ideal workers were possible. What this argument does is to undercut the functionalism inherent in the literature and debate on employers' needs. Chapter Seven expands on these points in detail.

(iii) The Theoretical Argument

This argument was more interesting and had wider implications for the empirical work. The basic point was that the ambiguities, inconsistencies and contradictions inherent in employers' statements of the attributes sought in applicants did not derive from the employers being confused about what their 'needs' were. Rather the contradictions within these statements derived ultimately from the contradictions between aspects of labour power itself. Labour power was a contradictory phenomenon it was argued. It was unrealistic of theorists and commentators to expect employers to conjure away these contradictions in their statements of attributes sought in applicants. They were forced to conceive of attributes sought in applicants (their 'needs' statements) in a contradictory manner. However, at the level of immediate appearances, within employers' statements of attributes sought taken at face value - there were not many obvious contradictions. These contradictions emerged when labour power was analysed in relation to these statements, and even particular attributes sought within these statements. At this point it became clear that 'needs' statements reflected contradictions within labour power.

This general theoretical stance had implications for the interpretation of the findings from the CEES. In Chapter Six it was shown that labour power attributes dominated the attributes sought in recruitment. It was further argued that these attributes reflected the contradictions within labour power, its contradictory aspects. From superficial observation of the attributes in Appendix 7, it was shown that some appeared to most readily reflect the subjective aspect of labour power, whilst others appeared to reflect principally the exchange and use value aspects (the collective aspect had not been developed in Chapter Six). However, it should be pointed out that no simple one-to-one relationship can be established just by simple

observation. First, this is because single labour power attributes may reflect and be intimately related to more than one aspect of labour power. This was established in the case of manual dexterity which related to both the use value and exchange aspects of labour power (Chapter Seven). The ability to mix and fit in related to both subjective and collective aspects of labour power (Chapter Twenty-two). Secondly, the precise way in which each employer defined the different attributes would require examination. As these definitions changed and shifted then the extent to which they reflected particular aspects of labour power would also change it could be argued. Employers might be using the same concepts to refer to different labour power strategies in recruitment. There is a difference between what aspects of labour power might reflect (as a matter of materialist analysis) and what they in fact appeared to reflect according to the emphases within employers' definitions of labour power attributes. On this last point, it was seen in Chapter Eight that the same attribute could be defined quite differently by various employers. For example, the ability to fit in had multifarious meanings attached to it. The relation between aspects of labour power and labour power attributes was only briefly touched on in Chapter Eight in order to establish the general principle of there being such a relation, but more sustained analysis is required to grasp the full implications of this approach.

(iv) The Empirical Argument

This was a complex argument running through Parts Two-Four of the thesis. It centred on the empirical point about whether employers, at the level of immediate appearances, were confused or inconsistent in relation to the attributes sought in applicants and the labour power attributes they specified (their 'needs').

The first point to note is that when employers were asked what they looked for in applicants for apprenticeships they always had an answer. It was not the case that they simply did not know. Some of the employers in small firms were a bit hesitant, not being used to talking to social researchers or

thinking so precisely about what they did - but eventually they came up with an answer.

Secondly, in stating what they looked for in applicants they generally kept their labour processes in view. This was shown in Chapters Seven and Eight. Even where attributes sounded as though they referred to the engineering sector of capital ('interest in engineering'), it was shown how this general interest took on a specific and concrete force for individual capitals. The 'general' attributes only took on meaning in relation to concrete capitals. The employers were interested in the applicants' general attitude to work only insofar as they believed it would become a concrete reality in relation to their labour process, their apprenticeship. It was no use if an applicant generally worked hard, but was not willing to work hard in a specifically engineering context within a particular capital.

Thirdly, there appeared to be few contradictions in employers' statements of the attributes sought in applicants. These statements only took on a contradictory form once they were related to what they basically referred to - labour power.

Furthermore, when the recruitment methods were examined they tended to reflect the priorities established in the statements of attributes sought in recruitment. Thus, the interview was seen as the most important recruitment method, and this was basically about assessing the most important classes of attributes sought - work attitudes and personality traits. The argument that the tests did not include attitude or personality tests was irrelevant. It was argued that although work attitudes and personality traits were the most important classes of attributes it made no sense to expect that all recruitment methods would just be about assessing these. There were other classes of attributes. The tests played a specific role; they gauged the level of key learned skills (numeracy, literacy) and general abilities (general intelligence, practical ability). As a package, and on the whole, attributes sought in applicants, the key criteria of recruitment, were consonant with recruitment methods.

The inconsistencies and anomalies and contradictions emerged in Part Four

when the relation between attributes sought, key ascriptive criteria (sex and race), and the recruitment methods were viewed through the lens of the recruitment channels - the means by which applicants and employers were brought together. At this point the argument gets very complex empirically, and only a simplified version is outlined here. Chapter Sixteen showed that MGTS employers were taking on substantial numbers of test failures. Unlike qualifications it was not the case that they did not know the results before taking them on. Neither was it that test passers could not be found; the Careers Service campaigns (Chapter Twelve) brought in more than enough who could get through the tests. Taking on test failures was part of a deliberate policy by some MGTS firms. They ignored the results and sometimes went against the advice of MGTS in taking on particular lads. And it was always white lads that were taken on as test failures, typically as craft apprentices where qualifications were not required by the college for day release. This was partly justified in terms of labour power policy; that some test failures had good work attitudes. But others did it for reasons unrelated to labour power policy, for example to accommodate the sons of employees as apprentices.

Next it was discovered (Chapter Sixteen) that a substantial minority of MGTS employers in the CEES sample were subverting the MGTS recruitment procedures and recruiting independently from other sources - principally from friends and relatives of existing employees. Clients and customers sons were also taken on to help cement business relationships. Such practices raised the question of control over recruitment. In order to carry out such discriminatory recruitment practices employers needed a high degree of control over recruitment. Chapter Seventeen showed how they exerted this control in relation to MGTS, the Careers Service and the EITB - organisations which in various ways 'interfered' in the recruitment process from the employers' perspective.

Chapter Eighteen showed that advertising strategies played a role in restricting apprenticeships to those locked into the informal networks of employees' friends and relatives and acquaintances of the employer. Word of mouth recruitment channels were used in a substantial minority of small and

medium-sized firms. Use of these recruitment channels particularly went against young blacks and females interested in engineering who were not so likely to be locked into them.

Whilst the employers were willing, to varying degrees, to give preferment to sons of employees and relax their criteria, they were unwilling to relax them for those not part of the informal network - casual applicants, door knockers looking for apprenticeships. These young people generally got short shrift (Chapter Nineteen), as did trade unions that tried to interfere in managements' 'right to recruit' apprentices (Chapter Twenty). Trade unions were only allowed into recruitment in a few firms who did it as part of a policy to incorporate the unions into their training setup. Where training was mainly on-the-job then a handful of firms argued that it was a good thing to have the unions involved in recruitment as they would then be more sympathetic to being involved in training apprentices. The danger was that such incorporation might lead to unions challenging recruitment according to sex or race; there was no evidence that they did this. Where trade unions did have influence in a wider sense was in relation to the rate-for-age system. The employers argued that this system interfered with them taking on older, better qualified lads as apprentices. They saw it as a real limitation of their social power as recruiters. By the same token they disliked EITB interference over apprentice numbers. Those patternmakers subject to the Coventry Patternmakers Agreement, which set a ratio of one apprentice to five craftsmen, saw this as a pointless nuisance as they could not easily respond to changing labour requirements.

All these issues showed that control over recruitment, particularly the recruitment channels in the first instance, was important. First it was important in terms of giving preferment to employees' sons, friends and relatives. This acted as a form of labour control, a carrot to dangle in front of (especially skilled) workers. Recruiting customers sons could help business. Furthermore, there was another pattern of owners, directors and top managers giving apprenticeships to their own young relatives who failed to get jobs in the open youth labour market. Where there were professional trainers and personnel staff this practice might be resisted on the grounds

of breaking professional ethics.

Secondly, control over recruitment was crucial to keep some young people out; especially young women, and to a lesser extent young blacks (Chapter Twenty-two). To the extent to which these positive and negative forms of discrimination operated then the whole recruitment process became anarchic. Youth were being recruited not according to the stated attributes sought (where sex and race did not figure) but on purely ascriptive criteria and blood ties. There may have been wider reasons (other than simple racism and sexism - although this existed, especially the latter) such as industrial relations considerations, but in terms of labour power policy, their own statements of labour power 'needs', such policies were unprincipled and anarchic. In the Apprentices' Study I came across examples of white males who were taken on despite not being interested in engineering, despite having failed the tests, despite not having done metalwork or physics and not having the right qualifications. Arguments that girls and blacks should have all these smacked of double standards. In the final analysis the empirical argument concerning employers' 'needs' showed that they could be ignored in favour of alternative discriminatory ascriptive criteria. It was not that employers were confused about their 'needs', rather they could ignore them for certain favoured applicants or frame new restrictive criteria for the unfavoured ones. Their ability to do this rested on their social power as recruiters and the extent of their control over the recruitment process.

(v) Some Underdeveloped Themes and Issues in the Thesis

The space spent on the split between craft and technician recruitment in the thesis was less than that envisaged originally. Earlier drafts of the thesis gave much more space to this issue and the relation between the split between craft and technician recruitment and the formation of the cleavage between mental and manual labour. Two considerations led to the eventual downgrading of this issue. First, it gradually gave way to the development of the overall understanding of the relation between the recruitment process

and labour power developed in the thesis. Secondly, it became apparent that further research would be required on the differences between what craftspeople and technicians actually did in the labour process so as to ascertain the extent to which the split between the two rested on considerations flowing from the labour process and the extent to which it derived from elements within the social production of labour power and the recruitment process itself. For example, the CEES could point to differences between numeracy and literacy skills demanded of craft and technicians, but nothing could be said on the extent to which these differences reflected the ways in which craft and technician apprentices used numeracy and literacy skills in training and at work, or the extent to which qualified craftsmen and technicians used them. Further research would be required.

Arguments about size of firm were also understated. Again, in earlier drafts of the thesis there was more material on the relation between firm size and attributes sought in applicants, other recruitment criteria, and methods and channels of recruitment. These arguments were extremely detailed empirically, very technical and ultimately not very revealing about what was going on in recruitment. In earlier drafts, pages of detailed empirical argument were spent on issues such as the relation between firm size and the importance given to the attributes in Table 6.1/3, for example. Compared to wider issues concerning the nature of the recruitment process and labour power these detailed arguments on firm size seemed fairly trivial and did not even illuminate the essentials of what employers do in recruitment.

The underdevelopment of the analysis of the social production of labour power in the thesis flowed from different considerations. Indeed, the more it was uncovered the greater its overall relevance became in terms of developing issues within the thesis. However, it became clear that a full understanding of the development of the social production of labour power in capitalism would require considerable extra work at a time, 1982-1985, when a massive theoretical exercise was out of the question for a host of reasons. Secondly, it also became clear that a study of the social production of labour power, especially working through its implications for Marxism as a whole, was a separate work in its own right. The real challenge

in the thesis was to develop an understanding of it that was minimally essential, to develop it up to a point where it enlightened key issues in the thesis, but no further. In future work the social production of labour power will be developed much further and its implications more fully elaborated than was feasible in this thesis.

Another underdeveloped theme was the relation between the three perspectives on labour power attributes outlined in the previous chapter. Only one of these perspectives was dealt with empirically in the thesis; labour power attributes from the perspective of recruitment. Further research would be necessary to discover the relation between labour power attributes assessed in recruitment and those socially produced and utilised in the labour process.

Finally, the arguments about sex and race as criteria were underdeveloped. In particular, specific historical and materialist arguments were not explored as to why employers in the CEES thought in terms of there being jobs for males/females and blacks/whites in relation to engineering. The historical research was not undertaken that could have thrown light on these issues. However, it was briefly indicated in Chapter Twenty-two what such research would entail. This is a further possible extension of the work of the thesis.

All the above areas of work could usefully be pursued as extensions of the thesis. The final section draws some very general conclusions from the thesis and suggests in general terms how work on the recruitment process might proceed in the future.

(vi) CONCLUSION: The Recruitment Process and Labour Power

The general conclusion of this thesis is that the recruitment process is essentially concerned with assessing labour power, specifically the labour power attributes of applicants. As labour power is a contradictory entity employers evolve certain strategies or labour power policies which reflect how these contradictions work themselves through within their own labour

processes, their general labour control strategies and the specificities of the labour process concerned. They grapple with the basic contradictions within labour power in different ways and this is reflected in their statements of attributes sought in applicants. The contradictions within labour power cannot be resolved short of banishing labour power from the labour process. For employers, there are just different ways, different approaches, to coming to terms with these contradictions. In terms of recruitment, when employers give statements on the attributes sought in applicants they are basically giving an outline of their labour power strategies, (as they tend not to distinguish between labour power attributes from the perspective of recruitment and from the perspectives of the social production of labour power or the labour process itself).

Underlying this view, and the whole thesis, is the argument that the recruitment process is basically to do with labour power assessment, the assessment of labour power attributes - in sum, labour power strategies and policies. On this basis, when other considerations enter the calculations in recruitment, considerations that are not connected to the assessment of labour power attributes, such as the sex and race of applicants, whether the applicant is related to an employee or the employer, whether s/he is the daughter/son of a client or customer or whether the applicant comes from a single-parent family - then the recruitment process becomes anarchic to the extent that these considerations enter. The recruitment process is diminished as a site for the assessment of the development of labour power attributes within applicants. Yet as we have seen, considerations such as the sex and race of applicants, whether applicants are employees' sons and so on do figure as important recruitment criteria. It can be concluded from this that, from the perspective of viewing the recruitment process as being about labour power strategy and policy, the recruitment process is basically unprincipled and anarchic in capitalism.

Hohn (1988) has tried to rescue the rationality of the recruitment process by arguing that when employers take on applicants on sex and race criteria they are basically enhancing the cohesion of the workforce and hence its productive power. Hohn put forward this view on the basis of what employers

in his study did in recruitment. But what these employers are in fact doing is to put the collective aspect of labour power in command in their recruitment policies. This is just a particular response to the contradictions between aspects of labour power. As was argued earlier, it may well lead the employer who follows this labour power strategy to reject black applicants who in all important respects, from the view of labour power attributes sought in white applicants, is superior. Hence, this labour power strategy is itself founded on a deeper anarchy, where labour power strategy becomes unprincipled and rests on common prejudice. Two conclusions can be drawn from this. First, any attempts to rescue the rationality of apparently irrational labour power strategies through emphasising one particular aspect of labour power (such as the collective aspect in Hohn) are doomed to incoherence as they assume one aspect can be pushed to the fore in analysis without creating problems in terms of other aspects of labour power. But then Hohn's argument only reflects what employers in his study actually do. What this points to is that what Hohn's employers do is ultimately contradictory. Secondly, a further conclusion is that what employers do in the recruitment process in terms of recruiting on certain criteria may well have a reason, but that this does not make what they do rational. This is because from the capitalist viewpoint there can be no overall, rational approach to labour power. The contradictions within labour power cannot be spirited away through efficient, shrewd or scientific recruitment strategies. The recruitment process is about employers framing labour power strategies and pursuing labour power policies within the framework of these contradictions. Employers can deal and cope with these contradictions within labour power in various ways but not erradicate them. It can finally be concluded from this that arguments about employer rationality in recruitment are themselves irrational; they assume a state of affairs where what employers do in the recruitment process can be underlined with specific reasons which can be justified in terms of labour power considerations, as with Hohn's arguments. But the thesis has shown that what employers do in recruitment will always be problematic in terms of labour power. Just as there can be no ideal labour power, so there can be no ideal

labour power strategies in recruitment.

On these conclusions, it can be argued that future research, study and analysis of the recruitment process should not attempt to reduce everything employers do to some overall rationality. Hohn, in taking great pains to show that what employers were doing was apparently rational, missed the real irrationality of what they were doing. Rather, the study of the recruitment process would most fruitfully proceed on the basis of acknowledging that what is being assessed in recruitment, labour power and its attributes, is a contradictory phenomenon. Hohn, on the other hand ends up attempting to theorise away contradictions within labour power - an impossible task. His analysis mystifies the nature of labour power. The importance of the study of the recruitment process is what it tells us about the nature of labour power and its social production. On the analysis in this thesis this is the real point of studying the recruitment process from a social scientific viewpoint.

The study of the recruitment process gains its essential importance from what it tells us about labour power, but labour power in turn is the real link between schooling and production in modern capitalism. This link is established through its social production, and Figure 2.1 is based on this premise. Thus, future research into the relationship between schooling and the labour process must take the process that binds these phenomena together as its foundation. The object of study must be the social production of labour power in capitalism. The social production of labour power is the real concrete process that links school and work. One of the main tasks in this research would be the analysis of the forces making for the fragmentation of the social production of labour power. This work would move the thesis into realms which are as yet largely unexplored.

NOTES TO ALL CHAPTERSNOTES TO CHAPTER ONE

[1] Paralleling the concerns of academic sociologists with the youth labour market, a few representatives of revolutionary groups have even gone further in arguing its importance. Thus, Rosenberg (1987) of the Socialist Workers Party argues that, '...the labour market is the single greatest influence on education.' (p.14), and the Revolutionary Marxist Tendency (1981) argue that the main role of education is to satisfy the labour market (p.46).

[2] Brown (1987a) points out that the issue of differential responses to schooling properly starts with a discussion of Hargreaves (1967). Most writers start with Willis (1977).

[3] Interestingly, Horne (1987) notes that three different 'types' of unemployed youth were pinpointed in the work of the Junior Instruction Centres in the 1930s. Thus, a pertinent extension to all the work on pupil responses to school might be to examine responses to YTS along similar lines.

[4] I am using frame of reference here as Brown (1987a) uses it; as a way of classifying working class orientations to school. Brown identifies three frames of reference amongst the working class pupils he studied (rems, swots and ordinary kids - (see pp104-106).

[5] Having observed the introduction of TVEI at close quarters in Coventry, Moore seems to be basically right, but his view overlooks the point that smooth imposition of such schemes requires a core of teachers and administrators committed (even if only on highly instrumental and careerist grounds) to this ideology and the implementation of educational policies flowing from it.

[6] In the Spring of 1980, through two supervision papers, 'Labour Process, Labour Market and Education in a Capitalist Crisis' and 'Labour Process, Labour Market, Youth and Education', I tried to integrate the new work on the labour process with work done on the transition from school to work. An analysis along the lines of Frith, in essence. These papers were important in terms of my coming to see that a Frith-type theorisation was not the answer. The labour process, in my view, is not the starting point. My starting point is labour power itself. There is no need to go through all the arguments of these papers here. The important point is that they were one of the steps on the way towards a concern with the social production of labour power as described in Chapter Two.

[7] Browne (1981) argues that the institutional separation of schooling from work is important in terms of the smooth production of mental and manual labour without explaining why such a separation originally arose. Whilst the Revolutionary Marxist Tendency (1981) argue that:

'Under capitalism education is necessarily separated from production. This instils the perception that production, and more precisely the means of production, are something independent of workers.' (p.47).

All this sounds too conspiratorial as though the state set up schools

specifically for this purpose, even though the separation may have this effect. Marxists must seek to explain such institutional separations, not just their effects.

[8] Interestingly, Brown in his 1987a and 1987b and Finn (1987) both refer to the Central Policy Review Staff (1980) to back up their claims that employers were ambiguous about their needs rather than actual studies of employers' needs. For Finn this was particularly strange as he had carried out such a study himself; (Finn and Markall:1981a,b). Writers who argue that employers are confused and vague about their needs cannot continue to get away with merely quoting these Government think-tankers; empirical evidence and analysis is required.

[9] Ahier (1977) takes a similar position, although he relates the functioning of the state in relation to education more directly and clearly to fractions of capital rather than using some even vaguer notion of sections of capital.

[10] This point is taken up in detail in Chapter Seven, where it is argued that it is in the youth labour market, at the level of competition, that the most immediate struggle between sectors of capital and individual capitals takes place.

[11] Finn is aware of the difficulties in specifying the relationship, for as he notes later on:

'What are articulated as the needs of employers are never a straightforward or unproblematic expression of the needs of the labour process.' (1987:p.121).

This point is correct, but he fails to work out its full implications.

[12] Lovejoy is refreshingly open about the fact that he has no general theory on the relationship between the labour process and training (1981a:p.5).

[13] This point will be discussed in relation to certain findings from my empirical work in Chapters Six and Seven.

[14] Lovejoy developed both Frith's work and his work with Bedale and Halford to produce an excellent paper on developments in the labour process in the building industry and the relationship between these developments and developments in training in the industry, his 1981b, the sort of analysis that is still unique.

[15] And this takes place after she has castigated others for not relating the labour process and labour market. Her explanation for this was that:

'...since the labour market and the labour process tend to be studied by writers from different theoretical perspectives and interests the connections between the two are often under-emphasised.' (p.67).

Unfortunately, she is correct on this point. Dale, Esland, Ferguson and MacDonald (1981) illustrate this trend even more sharply. In a section in their book entitled 'Education, the Economy and the Labour Process', (Section Two), only one of the seven articles has anything at all (Athar Hussain's) to say on the relation between education and the labour process. Even this article focusses mainly on the relation between education and the

labour market. Each of the other articles focus on one or other of the three aspects.

NOTES TO CHAPTER TWO

[1] Other examples of the elaboration of employers' needs as labour power needs; (Bews:1932,p589; Wilkinson:1931,p.258; Harrison:1934,p.25; Railing:1934,p.37; Blair Zimmern:1963,p.274).

[2] Unfortunately, these frameworks cannot just be taken over and utilised. They are too restrictive through proscribing in advance the categories of attributes employers (and researchers also) should be looking for. Oxenham's framework, for example, (1984,p.83), the most general and comprehensive of all those available, misses out work attitudes - the most important category of attributes sought in applicants for engineering apprenticeships. The strategy I pursue, and also pursued by others such as Cuming (1983), is to research employers' needs and then categorise them.

[3] Marxist theorists of capitalist schooling and training seem reluctant to dwell on this elementary point. Insofar as they do, they usually emphasise the sale of labour power as a commodity rather than its production as a commodity. Lovejoy, Bedale and Halford (1980) are an exception. Sarup (1982) typifies the trend. For Marx, the fact that labour power was a commodity was of great significance as the very system of capitalist production rested on the fact that the labourer sells her/his labour power as a commodity (1867,pp405-406).

[4] According to Willis (1977):

'Marx...never explains how labour power comes to be formed, subjectively, inhabited, given and applied to the production process in a certain way.' (p.179).

Marx did not explain how labour power comes to be formed in totidem. But he did provide the basic elements through which such an analysis can be constructed.

[5] Hodgson (1982) also makes this point but in doing so confuses the production of labour power with the production of the labourer. Hodgson argues, following Marx, that labour power is not produced under capitalist conditions. But then he commits an error. He argues:

'If human beings (i.e. labour power) were produced under capitalist conditions (i.e. for a profit) and sold on the market, then they would not be wage-earners, they would be slaves. The system would not be capitalism: it would be slavery.'(p.177).

Human beings are not identical to labour power. Labour power is a capacity which human beings (as wage labourers) have in a capitalist society. It is something they possess. Labour power is a commodity in the possession of the worker and it is not capital (Marx:1878,p.285,pp456-457). The production of labour power is not identical to the production of human beings as these two phenomena are not identical.

[6] Harding also notes that the lessons learnt in the labour process may also include elements inimical to the interests of capital through

integration into the organisations of the labour movement. The lessons learnt depend on the level of organisation and class consciousness of the workers. Thus:

'The integration of the young worker into the discipline of production is...double edged. The young worker may also be trained in the unity of interest between skilled men and the boss. Even if the tradition is not one of such open collaboration it is provided by the trade union leadership.' (1981,p.1).

[7] This term turns up in a section of a defunct chapter of the thesis: 'Some Observations on Institute of Personnel Management and Industrial Society Literature Since the First World War' (1982).

[8] Willis (1983) is an exception here. He gives a critical account of some of the ways in which 'Reproduction' is used in Marxist accounts of schooling in capitalism.

[9] As Marx noted, the labourer's productive consumption (of her/his labour power in the labour process) and his individual consumption (of her/his means of subsistence) are totally distinct (1867,pp536-537), and:

'In the former, he acts as the motive power of capital, and belongs to the capitalist. In the latter, he belongs to himself, and performs his necessary vital functions outside the process of production.' (ibid.).

de Brunhoff (1978) is excellent on the reproduction of labour power. She grasps it, like Marx, as a distinct social process. She argues that capital gives priority to valorisation and does not assume responsibility for the reproduction of labour power (p.12). The onus is on the worker (ibid.p.143). Hodgson (1982), on the other hand, mixes up social production and reproduction of labour power:

'Fresh labour power, of a particular type, can be produced by the feeding, housing clothing and training of an individual...' (p.70).

Feeding, housing and clothing are to do with the reproduction of labour power; training with the social production of labour power. The Education Group's section on 'The MSC and cultural intervention in the reproduction of labour power' is all about the social production of labour power (1981,pp234-238)

[10] This involves the maintenance of workers in old age, when they are sick and when unemployed. de Brunhoff (1978) provides a sophisticated analysis of the institutions involved and the relation of the maintenance of labour power to its value.

NOTES TO CHAPTER THREE

[1] Principally 'The Guardian' and the 'Times Educational Supplement'.

[2] The full text of the speech can be found in Callaghan (1976).

[3] the Education Group (1981); Sarup (1982); Brown (1987a), Brown and Ashton (1987); Fim (1987) have all expounded the salient issues.

[4] A conversion course for those whose first degree was not in sociology but who wished to do a higher degree in the subject.

[5] Such as Sarup (1978,1982); O'Keefe (1979); Carnoy (1982); Blackledge and Hunt (1985).

[6] These articles are summarised in Chapter One, Section (iii).

[7] For a discussion of the phenomenon of employers being confused or ignorant about their needs see Chapter One, Section (iv).

[8] See Venning (1976).

[9] Employers' complaints about the quality of school leavers in the 1970s were wide-ranging. They were 'appalled' at the quality of school leavers technical skills, basic numeracy and literacy, work attitudes, social skills and appearance (Clarke and Willis:1984,p.3). Reid (1980,pp53-54) provides another similar list of employers' complaints, but with greater emphasis on poor work attitudes. Other summaries of employers' complaints can be found in Lynch (1979,p.28); Roderick and Stephens (1982a,p.5) and Avent (1982,p.65). In their employers survey in Salford, Finn and Markall (1980b) found that one third of employers' complaints centred on formal schooling (especially numeracy and literacy) but two-thirds concerned issues of reliability, discipline and character (p.38). Employers' complaints about the quality of school leavers seem perennial. This point is emphasised by Frith (1980b) and Avent (1980). Evidence for this claim can be found in management journals; on criticisms of school leavers literacy and numeracy see Hicks Bolton (1923); Distribution (1924); Manchester Guardian (1926); Bews (1932) and Dixon (1979). On complaints about character and attitude see Hicks Bolton (1923); Kelly (1923); Schofield (1923); Kessler (1924); Marsh (1925); Wilkinson (1931a). Oxenham (1984) points to the international dimension of employers' complaints about the quality of school leavers. He provides evidence from Sri Lanka, India, Zambia, Tanzania and Kenya on employers perceptions that educational standards were falling.

[10] Specifically the journals of the Institute of Personnel Management and the Industrial Society (formerly the Industrial Welfare Society). I read monthly journals from these two organisations covering the period 1918-1980. Cuming (1983,p.43) demonstrated that there was considerable variation between industrial groups as to the attributes employers looked for in applicants for youth jobs, providing firmer grounds for my original circumspection on this point.

[11] For example, Railing (1934), on the needs of the electrical engineering industry.

[12] MSC/Coventry Education Department (1977a,b,c).

[13] Especially conversations with Ken Grainger, Kevin Buckley and Zena Lindfield.

[14] The other Careers Service categories for fifth form leavers jobs were professional/clerical, traineeships and other jobs. In 1978 and 1979 apprenticeships took up 45% of all engineering jobs entered by fifth form leavers. In the early 1980s engineering apprenticeships held up spectacularly relative to other youth jobs in engineering. In 1982, 80% of fifth form leavers getting jobs in engineering went into apprenticeships (CCS:1982b). For a detailed analysis of trends in apprenticeship in Coventry

see Chapter Five, Section (x).

[15] op. cit. [10].

[16] Ashton, Maguire and Spilsbury (1987) use similar technological determinist explanations for the decline in apprenticeship in contemporary conditions. They argue that new technology (such as CNC in engineering), new forms of work organisation (Japanese-style management) which attempts to ensure greater worker commitment, a more formalised division of labour between core and periphery workers and flexible training (the module system) aimed at producing skill according to standards as opposed to time-serving are factors undermining contemporary apprenticeships (pp165-166).

[17] For example, Harden (1925) and Bramham (1974). However, as the Carr Report (1958) noted, people were saying that the apprenticeship system was outmoded in 1800, yet it constantly adjusted to meet new conditions. Williams (1957) gives an account of these processes of adjustment from the sixteenth century. In a later work, Williams (1963) came to view the apprenticeship system as being in a state of terminal crisis, engendering dire skill shortages, unduly restrictive age limits, a rigid division of the skilled from other workers and chronic demarcation. Writers in the journals surveyed also pointed to the apprenticeship system as being at the root of constant skill shortages (Principal of a Large Technical College:1936; McLeoa and Adamson:1972) and more recently the Department of Employment (1981) and the MSC (1981) have argued that the apprenticeship system is inadequate to meet current and future training needs. The Department of Employment (1981,p.3) set a target date of 1985 for the replacement of apprenticeships by training to recognised skill standards. Short (1986) argues that the YTS is a direct attempt to destroy the apprenticeship system.

[18] Recent observers (More:1982; Lee:1983) have noted that one of the attractions of apprenticeships for employers was that it only took about two years to train an apprentice up to the point where they make an economic contribution. Employers then have cheap skilled labour for the final two years of the apprenticeship. This is why employers have generally been against cutting the length of the apprenticeship (Lee:1983,p.241).

[19] See Lee (1979,1981,1983); Harding:1981; More:1982; and Goldstein:1984.

[20] Previous research on employers' needs, for example, Finn and Markall (1981a,b); Ashton and Maguire (1980b); Ashton, Maguire and Garland (1982) and Cuming (1983) is trapped within a needs of industry perspective. Even though inconsistencies in the criteria of recruitment are noted, these criticisms take place within an approach which yields far too much to the coherence of employers' demands. Chapter Six demonstrates these points.

NOTES TO CHAPTER FOUR

[1] Described in Chapter Three, Section (iv), sub-section (c).

[2] However, Beveridge (1963) noted that less than 2,000 apprentices were being trained through group training schemes in Federated firms, out of 95,000 in training. Beverstock (1964) says that some group training schemes

in operation in engineering were run by the Engineering Industries Association, whose membership was composed of medium and small firms (p.60). He also points to schemes in South-east Essex and Enfield which had been in operation 'for some years' (ibid.), and a scheme run by the Scottish Electrical Training Scheme (ibid.). The Carr Report (1958) recommended the expansion of group training schemes generally as they provided cost effective training for small firms (p.16).

[3] The training levy varied from 2.5% of the payroll of a firm (Engineering) to only 0.035% (Electricity). Nearly all the levy was repaid in the form of training grants (with some individual firms receiving more in grants from their Board than they paid out in levy). Grants were given provided firms undertook training approved by their Board. After the Employment and Training Act (1973), firms could gain exemption from levy if they met their own training needs. Furthermore, all firms with under 60 employees were exempt from levy.

[4] For a detailed account of the genesis of the 1964 Act see Perry (1976). For details of developments within 29 Training Boards set up by the Act see the JOURNAL OF THE BRITISH ASSOCIATION FOR COMMERCIAL AND INDUSTRIAL EDUCATION (BACIE JOURNAL). And for particular industries see the Annual Reports of the various Boards.

[5] In May 1971 Warwickshire Training Services had 143 member firms, training 670 apprentices and 36 junior office workers with a staff of 20 training personnel and new offices in London Road Coventry (EEF:1971).

[6] From a plaque in the MGTS Training Centre, Parkside, Coventry.

[7] But most of this information came from interviews with Ken Wardle, the MGTS Recruitment Officer and Roger Gilbert, the CDEEA Training Executive, in May 1980.

[8] These tests included elements on General Intelligence, Simple Arithmetic, Simple Maths, Mechanical Physics and Spatial Conjunction. For a general discussion of the use of tests by CEES firms see Chapter Fourteen, Section (ii).

[9] Out of 194 firms in the Coventry area having apprentices listed in a Careers booklet on engineering apprenticeships in 1979, 125 (65%), used MGTS for recruitment (CCS:1979a).

[10] A project on leisure, drug-taking amongst youth in Coventry (Frith:1981a).

[11] See the 'Letter of Introduction' in Appendix 3.

[12] In a Review of the Pilot Study of Engineering Employers in Warwick and Leamington, 16.10.1980.

[13] All the interview schedules can be found in Appendix 3.

[14] General definitions such as the following did not seem useful:

'Apprenticeship is the contractual relationship between an employer and a worker under which the employer is obliged to teach the worker...and...the worker is to serve the employer...on stated terms.'
(Liepmann:1960).

They were too legalistic and relied too much on the indentures as a binding legal contract. Indeed, Beverstock (1964) points out that legally, apprenticeship does not exist unless there is a deed of apprenticeship, an indenture, signed by the apprentice, the employer and a guardian, setting out the terms and conditions of the apprenticeship (p.33). As we shall see later in this Section, some quite large firms in the CEES had no indentures for young people they called apprentices. Legalistic definitions are tied too much to the notion of the old apprenticeship as defined by Parkin (1978) in the previous Section. Smith's (1966, pp109-110) definition is also biased towards the old apprenticeship with an emphasis on time-serving and being trained on-the-job by a skilled man.

[15] The National Advisory Council on Education for Industry and Commerce (1969) believed that attempting to define the term 'technician' '...would have been an exercise in trying to define the indefinable.' (p.3).

[16] Details of a study carried out using this material can be found in Appendix 1.

[17] For a detailed statistical picture of key characteristics of the CEES sample see Appendix 4 Tables App4/1-9.

[18] These size groups are maintained throughout the thesis when data by size is presented. Letters, Group A (for up to 50 employees) to Group E (for 1001+) are used to denote the five size groups.

[19] These points are illustrated in Table App4/1, Appendix 4.

[20] Dobson (1966) and Woolhouse and Haxby (1966) give an idealised, but useful, account of technician training.

NOTES TO CHAPTER FIVE

[1] Friedmann (1977b) gives a concise account of Coventry's industrial development in the nineteenth and twentieth centuries.

[2] Metal manufacture in Coventry at this time centred around pin and needle making, brass and pewter work, jewellery, watches and clocks.

[3] For the Coventry Employment Exchange Area, manufacturing provided 66% of the Area's jobs and motor vehicles alone provided 36% (Rosser and Mallier:1981,p.11).

[4] For comprehensiveness the City Council's Economic Monitor relates the dynamics of Coventry's decline in the greatest detail. Those wishing to chart this decline should consult the Monitor; it is not necessary to paw through the entrails of Coventry's economic carcase to that extent here.

[5] See Figure App4/10, Appendix 4.

[6] MSC/Coventry Education Department (1977c). The TIWA includes Bedworth and Nuneaton.

[7] From the Department of Employment Gazette for these months. Refers to TIWAs in the West Midlands Region, which includes the West Midlands Metropolitan County, Hereford/Worcester, Shropshire, Staffordshire and Warwickshire.

[8] *ibid.*

[9] See Figure App4/11, Appendix 4.

[10] Figure 5, p.24 in MSC/Education Department (1977c) illustrates that unemployment amongst under-18s was indeed worse in Coventry than elsewhere in the West Midlands County, especially for females. Figures App4/12i-iii, Appendix 4, show that Coventry's unemployment was worse than that of Great Britain and the West Midlands Region 1976-1977 and 1979-1981.

[11] The data for this section is based on the Department of Employment's quarterly Age and Duration statistics for the Coventry Jobcentre Area. Comparisons were drawn from the quarterly Age and Duration statistics from the Department of Employment Gazette. The data has been analysed with reference to the following age groups: the under-25s, 25-44 year olds and 45+ year olds.

[12] See Figure App4/13, Appendix 4.

[13] People who had been unemployed for over 52 weeks.

[14] With their own Careers Officers based in their schools. For a description of the City's decentralised Pastoral Base Careers Service see (CET:16.12.81).

[15] Chapter Four, Section (vii), 'Autobiographical Note', refers to my work for the Coventry Education Department. By late 1982 there was overcapacity, too many YOP places in the City in relation to the number of young people eligible to take up YOP places.

[16] Yearly averages based on monthly figures from Coventry Careers Service Monthly Returns, Unemployed Young People.

[17] Frith (1980b) discusses why young people were particularly vulnerable to unemployment in the 1970's. He cites changes in the labour process, the success of trade unions in getting better wages for youth, the decline of casual labour, supervision costs and the need for workers who had the qualities of 'responsible autonomy', and the competition from married women in some jobs. He also noted the effect of 'first in first out' redundancy policies and the ways in which firms cut training in a recession, especially apprenticeships, as other factors affecting the recruitment of young people in particular. Cohen (1983) explains it in terms of the 'structural irresponsibility of youth' (p.35). Young people are not typically involved in raising a family or paying a mortgage, thus they can safely adopt an 'irresponsible' attitude to work, leaving jobs for 'trivial' reasons. The Elles Report (1974) also pointed to changes in the labour process brought about by technological change, legal restrictions (on hours and shift working) and collective agreements which kept youth out (in the docks, car plants, public transport).

[18] Most of the 'Others' leave the district. A sizable minority were not available for work for family reasons (to look after younger siblings) or to have a baby. For only a few was their destination 'Unknown'.

[19] The calculations were based on totals including special school and 'out of town' leavers.

[20] Mallier and Rosser's (1980) study of skilled craft worker shortage in

Coventry found no evidence to suggest any general shortage of skilled workers in engineering, although there was some evidence to suggest a tight labour market for sheet metalworkers. In 1979, the National Society of Sheet Metal Workers & Heating Engineers in Coventry responded to calls by the CDEEA to ease this situation by granting membership to skillcentre trainees. However, Mallier and Rosser's work showed that there was no general pressure on employers to increase apprentice recruitment as a result of skill shortage. The ghost of skill shortage seemed to continuously haunt the landscape of Coventry engineering according to employers' accounts in the local press. Local trade unionists also sometimes echoed these accounts; for example, Bucknall (1980). The mid-1980s 'skill shortage' in Coventry (CME:3/1985) may have had more substance owing to the collapse of apprenticeships in the early 1980s.

[21] See Table App4/16, Appendix 4.

[22] For detailed information on these rules see Coventry City Council (1970/74), Lord Mayor's Secretariat, Coventry City Council House, and, Coventry City Council (1927), Coventry Local Studies Centre. For a summary, see CCS (1979a).

[23] Calculated from amalgamating totals from those who took apprenticeships in the following industrial classifications: metal manufacturing, vehicles, mechanical engineering, electrical engineering, instrument engineering and other (metal goods)

[24] Although as we shall see in Chapter Nine, in some firms, especially the smaller ones, no qualifications were necessary.

NOTES TO CHAPTER SIX

[1] The importance of this little known work to the thesis as a whole, and this chapter in particular, cannot be overemphasised. It rightly figures at the top of the list in the Acknowledgements.

[2] These differences are illustrated in Appendix 7.

[3] There is a tendency to simply state that employers believe work attitudes are important, or specific work attitudes - and then just leave it at that; no comment, no explanation. Green (1983,p.63) epitomizes this trend.

[4] Holloway and Picciotto:1979; Frith:1980b; Sarup:1982; Roberts:1984 - are just a few.

[5] In the following there is an expressed concern with work attitudes in general or particular work attitudes: McWilliam:1921; F.E.F.(Reviewer):1922; Schofield:1923; Hicks Bolton:1923,1925; Kessler:1924; Manchester Guardian:1926; Brock:1965; Cotterill:1971.

[6] Allen,Evans,Freeman and Marshall (1978) noted that C.F Pratten, in The Efficiency of British Industry, Lloyds Bank Review, No.23, January 1977, argued this view strongly.

[7] There are mitigating circumstances here. Arguments along these lines sometimes degenerate into mystical stereotypes about the National Character.

The British, argue Roderick and Stephens (1982a), do not seem to want to work hard. Their poor work attitudes are thus irredeemable. But at least there is some explanation embedded in this view, and a critique of it might have yielded a more sophisticated perspective. It is the lack of interest in explanation that is puzzling.

[8] In particular: Arthur:1980; Cressey and MacInness:1980; Cooley:1981; Manwaring and Wood:1985; Hohn:1988; Windolf:1988a; Wood:1986,1988.

[9] Braverman (1974) has been heavily criticised for removing the subjective aspect of labour power, the labourer's consciousness, will and intentions (Cressey and MacInnes:1980; Elger:1979,1982). Elger (1979) argues that Braverman fails to see labour as an active and problematic force in the labour process. This force brings consciousness, will, imagination, political aspirations to the labour process (Cooley:1981). Molina (1977) argues that Marx himself exiled consciousness and will from his theory in 'Capital', but as Elson (1979) has conclusively shown, these figure in Marx's conceptions of concrete and collective labour. As the next Note shows, Marx placed mental capabilities and the will within his definition of labour power, and, as we saw earlier, at the centre of his definition of human labour itself.

[10] Labour power is:

'... the aggregate of those mental and physical capabilities existing in the physical form, the living personality, of a human being, capabilities which he sets in motion whenever he produces a use value of any kind.' (Marx:1867,p.164).

Note that the activation of labour power rests on the will of the worker.

[11] Mitchell (1970) points out the peculiar legal problems involved in employers attempting to sack their apprentices.

[12] It is not necessary to go into the theory of the real subordination of labour here. Cressey and MacInnes (1980) themselves give a summary. Elger (1979) also gives an excellent summary and relates his discussion to Braverman's (1974) inadequate treatment of the topic, where the latter overstresses real subordination theory to the extent of theoretically creating an inert working class.

[13] The utilisation and actualisation of these attributes can be studied in the labour process. Stevenson (1977b) argues that skills analysis and work study are basically about the study of the attributes of labour power (pp24-25).

[14] The relative quality of the attributes socially produced, as opposed to the specification of these attributes, is a different matter, and will be dealt with in the next chapter.

[15] Wood (1988) found that in practice recruiters do not clearly differentiate between the attributes relevant to specific jobs and whether these attributes exist in applicants for jobs. Here we are concerned with grasping what the attributes of labour power are not the confusions of employers concerning what they are.

[16] Nevertheless, in recent years the underdevelopment of the social

production of labour power in this sphere has been partly remedied through MSC training schemes. A number of theorists have noted that these schemes are basically about attitude formation or character development (Finn:1979; Stafford:1981; Raffe:1981; Scofield, Preston and Jacques:1983; Green:1986). Stafford (1981) argues that the old YOP was all about altering the personalities and attitudes of youth in line with the expectations of employers. The importance of these schemes is that they are a new phase and strategy in the social production of labour power.

NOTES TO CHAPTER SEVEN

[1] As Richards (1979) notes:

'The nature of capital in general must be grasped before the relationship between individual capitalists can be understood.' (p.9).

Which is why the early chapters, especially Chapters One, Two, Six and this Chapter Seven, spent so much time on categories deriving from capital in general. But:

'...capital in general is not to be understood as a form of capital alongside particular capitals, imposing itself on particular capitals with some ruthless logic. Capital in general only exists in the form of particular capitals and their interrelation. On the other hand, capital in general is not to be understood in terms of the relations between particular capitals as distinct from those capitals themselves. (Clarke:1978,p.53).

And ultimately, 'Capital in general is an abstraction from the different forms of capital'(Richards:1979,p.9), what all capitals have in common, '...the quality of being capital.' (ibid.).

[2] It should be apparent at this point that I disagree with those such as Finn (1982) who argue that employers are not concerned with employment-related abilities, but are concerned with general dispositions and characteristics and hence their demands are 'extremely vague'(p.43). It was argued in Chapter Six that there is no clear demarcation between the attributes of the person and labour power attributes. The former can become the latter, and can be socially produced as the latter, under definite conditions of the labour process or the social production of labour power. The attributes of the person, including general dispositions and personality traits, can be subsumed within labour power to varying degrees, become one of its powers which make up its total labour capacity. If what Finn says is true, then employers are totally irrational. This does not ring true from my experience of the CEES. The employers were canny and hard-headed, generally took recruitment seriously and kept the conditions of their own labour processes, specific jobs and training systems in view. Wood (1988) took this view when he argued that:

'Managers are not...interested in good attitudes or compliance to bureaucratic control as ends in themselves. Factors such as 'personality' were seen by the managers we interviewed as important, but what constitutes a 'good' personality is highly contingent upon the kind of job, and the situation in which it is located ..[Thus].. The precise

nature of the 'social' skills required...varies with the requirements of specific jobs; they are, in effect, as job-related as any 'pure' technical skill.' (p.23).

When they say they are looking for a 'pleasant personality' they can typically qualify and expand on what this means, and this meaning typically relates very closely to 'employment-related abilities', abilities pertinent to work in the labour process or training. This point can be most readily appreciated in relation to the qualitative data in Chapter Eight.

[3] This is behind the notion of transferable skills. Training in these is aimed at increasing the horizontal mobility of labour (Green:1983; Gleeson:1985).

[4] Flexibility in labour power has had particular resonance since the Second World War, in the demands of employers (FBI:1958; Reeder:1979), Government reports (Carr Report:1958; Schools Council:1967; Brunton Report:1973; OECD:1977a; Department of Employment:1981; MSC:1981), within sociological and labour market literature (Moos:1983; Avis:1981; Cohen:1982; Gleeson and Mardle:1980; Finn:1982; Hirsch:1983; Hohn:1988; Brown:1987b), and socialist literature (Hassell and Binnette:1988; Freeman:1984,1988; Gibson 1987; Callinicos:1981; Scofield, Preston and Jacques:1983). A host of other references are given by Pollert (1988), who notes a number of different notions of flexibility and adaptability are at work here. The great merit of Pollert's excellent article is that she disentangles these and ultimately dismantles the notion of flexibility too, through arguing, as Callinicos (1981) also argued, that capital has always demanded flexibility of labour power. The sort of flexibility I described in Section (iii) is functional flexibility, where the worker moves between jobs on the basis of being multi-skilled through training. Gibson (1987) gives some evidence which suggests that functional flexibility plays a small role in the British economy, and where it exists it is confined to manufacturing. Pollert herself argued that functional flexibility has been much overstressed, and that the evidence for its increased importance was slight. Its widespread use is limited by the cost of retraining (Pollert:1988,p.56). It is important to distinguish functional flexibility for individual capitals and sectors of capital, a distinction that gains effectivity at the level of the labour market. Functional flexibility can take place in the internal labour market as the worker moves between jobs in the same firm, and it takes place in the external labour market as the worker either moves within a sector of capital or even out of the sector altogether. Flexibility and adaptability did not figure much in the CEES. Only two employers sought it in applicants for apprenticeships.

[5] Marx (1865a) warned against reliance on employers' conceptions and perspectives in the scientific enterprise. The conceptions of manufacturers are '...vitiated by the acts of circulation to which their capital is subject..' (p.313).

[6] The manifestation of these labour power attributes through a study of actual labour provides an indirect specification of 'human capacities for certain types of labour' (Taylor:1979,p.31).

[7] See Chapter One and Brown (1987a) for more argument on this point.

NOTES TO CHAPTER EIGHT

[1] This statement was made at a conference for teachers, industrialists and parents at Lyng Hall school entitled: 'Motivation - our Common Problem'. See also (CET:25/6/1977), blaming the schools and 'educational theory' for low motivation and resulting scruffiness amongst school leavers looking for jobs in the City.

[2] In particular, Coventry Youth Opportunities Unit (1979b). On p.13 of this report, 95% of the employers surveyed said that the physical appearance of young people was an important factor in selecting for Work Experience on Employers' Premises (WEEP), and: 'From the interviews with employers it was evident that, in most cases, the criteria employers used when selecting young people for WEEP differed little from the selection criteria they used when appointing permanent staff.' (p.14). Employers '..thought that the way young people presented themselves at interview provided an indication of their attitude to the job, **irrespective** of the type of work involved.' (p.13 - my emphasis). Unfortunately there is little information about the sample of firms surveyed.

[3] As one employer put it in Ashton and Maguire (1980b): 'We do not mind them turning up in jeans, but there is a difference between someone who has a clean shirt and jeans, and someone who obviously does not care about his appearance.' (p.153).

[4] For example, (MSC/Coventry Education Department:1977a) noted that young people, as compared with adults, were particularly criticised on 'work attitudes, appearance and basic education' by local employers (p.38). It was also pointed out that employers usually blamed schools and parents for these 'failings' (ibid., p.39). See also, IFF (1977) on this issue.

[5] Surprisingly only 7 out of 90, (8%), of employers in the survey, said that: 'Attitudes of young people to authority, timekeeping, dress ..[were]..not acceptable.' - (CBI Special Programmes Unit:1983, Q.26 of Employers' Questionnaire.

[6] Especially from editions of the JOBHUNTER, a paper produced by the Careers Centre for young jobseekers from 1978-1981. See for example: (Jobhunter:6/2/1979), a guide to interviewing. Tip 4..'No one expects you to turn up in evening gown or top hat and tails, but a REASONABLY SMART appearance will impress the interviewer.' On engineering in particular, CCS (1979a), urged applicants for apprenticeships to : 'Be early, be smart, be keen' in the 'Check List for Applicants'. There was also a piece about Deborah Yeowell, an apprentice with Salt Engineering, who did well in her interview as her attitude to work and appearance were 'in her favour'.

[7] Also (CET:21/2/1978), where John Temple, Leader of the Coventry Education Department's Youth Opportunities Unit, noted that:

'Recent studies...emphasised the stress placed by employers on the attitudes, appearance manners and interview techniques... of young applicants...[and that]..Very often the boys and girls fail to live up

to employers' expectations.'

[8] For example, Ken Wardle, MGTS Recruitment Officer, stressed the importance of dressing neatly (Jobhunter:24/4/1979), and GEC Training Officers pointed out that '...a smart appearance could set you on the right road' (Jobhunter:23/1/1979).

[9] In Coventry Education Committee (1978a). The research was carried out by Joan Worthy and Ross Maden of Tile Hill Wood Comprehensive. All 13 of the firms they visited were engineering firms in the City. They noted in their findings that: '...most employers expect that the candidate will: (i) dress with the formality appropriate for an interview'. A shorter version of the paper (Worthy and Maden:1979), was distributed to local schools.

[10] There were also links between appearance and ability to mix/fit in, as we shall discover in Section (v).

[11] IFF (1977) seems to contradict the main Report on young people being compared unfavourably with older job seekers: 'It is important to note that employers are generally not more critical of YPs than of adults.' (p.8).

[12] Bazalgette (1978) predicted that employers in Coventry would increasingly refuse to employ young people if their critical attitudes persisted (p.109).

[13] These findings appear to conflict with an earlier paper by Frith (1976), where he quotes from one of Buckley's research reports: 'The apprentices' attitudes to their work are not essentially different from that which the literature so often attributes to 'unsuccessful' youth in dead-end jobs.' (p.4). Frith and Buckley's (1978) commentary on the 'Coventry Report' highlights its main shortcomings.

[14] In CET:17/10/1979, Aitken agreed with the EITB that '...school-leavers standards in mathematics, communication, and personal attitudes to employment were not good enough.' See also CET:25/6/1977, and CET:19/1/1980, where Aitken said that some young people 'are not trying any longer' to get jobs. The 'Coventry Evening Telegraph' usually backed up Aitken's assessments on young peoples' work attitudes.

[15] However, in CCS (1963), it was noted that it was 'disturbing' to find 17 year olds '...who had developed attitude and work habits which made them unacceptable to most employers.' (p.6). A later report, (CCS:1967) noted that some of those who failed to find work had 'an irresponsible attitude to work.' (p.10).

[16] The careers officer was referring to apparent 'slow take-up' of YTS places in the Summer of 1983. For a real analysis of the empty places see Richards (1984).

[17] The Youth Opportunities Unit also found that WEEP schemes on the YOP often involved similar criteria of entry to youth jobs (Youth Opportunities Unit:1978b). Some YOP schemes made it known that they only wanted people who wanted to work, for example the City ITEC (CET:8/1/1982).

[18] Coventry Careers Service, Monthly Returns, Unemployed Young People - Statistics as at 9th February 1978.

[19] In CET (17/10/1979), the Director of Education, Robert Aitken, agreed

with EITB criticisms that young peoples' attitudes to work needed improvement. As early as 1974, at a Conference on the education of 16-19 year olds, Sir Lincoln Ralphs, Chairman of the Schools Council told representatives from industry, further education and schools that: 'What we have to do is educate attitudes and values.' (CET:10/5/1974).

[20] For more on this see: Richards (1982a); Reese (1982,1983). On Coventry LEA's plans and measures to improve attitudes to work (amongst other things), and its general approach to education in the 1980s see: Coventry Education Committee (1981,1982,1984,1985). For an overview see: Coventry Education Department, Forward Planning Unit (1984b).

[21] A similar explanation was discovered by Bazalgette (1978) in his case study of Polydra Engineering, a large firm in Coventry. Instructors in the Apprentice and Training Centre were all concerned about attitudes to work of their apprentices, accusing them of being 'lackadaisical' and 'apathetic'. One superintendent blamed teachers, with their 'general attitude' of 'take it or leave it.' (p.18). The Institution of Training Officers (Coventry and District Branch) (1973) Working Party also blamed schools for setting '...inadequate achievement targets for individuals.' (p.8). Four of the six members were engineering representatives.

[22] The CDEEA also noted the need to recruit young people '..with a willingness to work without supervision.' (Gilbert:1977,p.7). Sir John Methuen of the CBI argued that employers were looking for personal qualities in young people, '...which were of even greater importance' than numeracy and literacy. One of these was, '...the ability to work responsibly and safely with the minimum of supervision.' (CET:27/3/1979).

[23] A prize sponsored by the Coventry Chamber of Commerce (CET:12/6/1979).

[24] See also Jobhunter (24/4/1979), where Ken Wardle, MGTS Recruitment Officer, made the additional point that (as with interest in engineering) applicants had to convince employers they had a sincere interest in the job. Such advice could be disastrous if followed in relation to some firms.

[25] The Director of Education noted a parallel problem in Coventry secondary schools: 'If we acknowledge the vulnerability of individuals and society to group pressures - drugs, vandalism, cults, football hooliganism, mods and rockers etc. - and the vulnerability of groups to manipulation for political, racist religious or other ends, it suggests to me that our youngsters need a better preparation in understanding and withstanding group pressures and processes.' (Aitken:1981b).

NOTES TO CHAPTER TEN

[1] In particular, the monthly journals on the Institute of Personnel Management and the Industrial Society. For complaints in the 1920s and 1930s see, for example: Fee:1920; Hicks Bolton:1923; Distribution:1924; Hicks Bolton:1925; Manchester Guardian:1926; Bews:1932.

[2] This point will be examined in Chapter Twelve when the staying-on rate in Coventry is examined.

[3] Research Notes, from Interview with R.W. Gilbert, 16.5.1980.

[4] *ibid.*

[5] Also from Research Notes, Interview with R.W. Gilbert 9.5.1980., on the point of not relying just on decimals. Worthy (1976) carried out a study amongst engineering employers in Coventry in 1976 for the Coventry LEA and came to similar conclusions. Her general findings echoed Gilbert's views.

[6] I have deposited the most important of these in the University's Modern Records Centre - Gilbert:1976,1977.

[7] Barrow's (1979) definition summarises what we are dealing with:

'...the facility to compute, deal in figures and think in quantitative terms.'(p.198).

[8] Gilbert gave me a copy of Basic Skills in Mathematics for Engineering: An Illustrated Guide, University of Nottingham/Shell Centre for Mathematical Education: 1977., and Maths After School, North Yorkshire County Council Education Department: June 1977., and I found these particularly useful.

[9] Research Notes, Interview with Ken Wardle, 16.5.1980.

NOTES TO CHAPTER ELEVEN

[1] Research Notes, Interview with Ken Wardle - 16.5.1980.

[2] Interview Record, MGTS/KTW/16.580., in Appendix 2.

NOTES TO CHAPTER TWELVE

[1] Sources used for the conclusions drawn here were, CCS: 1975b; 1977a; 1977b; 1977c; 1977e; 1978a; 1982g; 1982h and Aitken:1979.

NOTES TO CHAPTER SEVENTEEN

[1] Based on notes from an Interview with David Gay, Assistant Principal Careers Officer, 12th June 1980, Coventry Careers Centre, Greyfriars Lane.

NOTES TO CHAPTER TWENTY

[1] According to the Personnel and Training Officer, it cost between £15-20,000 to train an apprentice. They were not a 'cheap option'. However, recent calculations by Jones (1986) on the net costs of training engineering apprentices, where the contribution of the production work undertaken by apprentices is taken into account, yielded a net cost of £8,900 on average and a variation between £8,400-10,500 per apprentice. Observation of Jones' calculations does not reveal that training board grants were taken into account, or levies, which - given the high proportion of firms that had gained exemption by the late 1970s - may have lowered net costs still further had they been taken into account.

A STUDY OF THE RECRUITMENT OF ENGINEERING APPRENTICES
IN COVENTRY

In Two Volumes

(Volume II : Appendices and Bibliography)

by

GLENN RICHARDS

A thesis submitted for the degree of

Doctor of Philosophy

in the University of Warwick

Department of Sociology

September 1988

VOLUME TWO

[APPENDICES AND BIBLIOGRAPHY]

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APPENDIX 1SUMMARY OF OTHER STUDIES (Not Described in Chapter Four).

This appendix describes other historical and empirical studies and data and information-gathering exercises not described in Chapter Four. Chapter Four was only concerned with the main fieldwork studies.

A) OTHER STUDIES CONNECTED WITH THE CEES(i) Telephone Notes

This study derived from the CEES. It involved taking notes whilst and after phoning the employers to arrange interviews. Little use was made of these notes in the thesis. They remain largely unanalysed. The aim of these notes was to illustrate certain problems of gaining access to interview in a sector of industry, and in a town, severely hit by recession. They were extremely useful in providing important information in terms of CEES interviews, as they gave me some idea of the training and apprenticeship setup within specific firms before the interview.

(ii) Ephemera: the CEES

This was a collection of letters (either rejections for interview, acceptances or postponements of interviews), examples of tests, application forms, training opportunities booklets and promotional material gathered whilst conducting the CEES. Some of this material was used in Chapters Six-Ten.

(iii) Research Diary: June 1980-October 1981

My time was so congested during this period that a diary of events was essential. It was important to try and plan activities at least a week in advance given the fact that I could be working on two or three key studies

in a particular week. The Diary was particularly useful in relation to the reconstruction of research activities outlined in Chapter Four.

B) OTHER STUDIES CONNECTED WITH THE APPRENTICES' STUDY

(i) Research Notes: Apprentices' Study and on the Training at MGTS

Extensive research notes were made in relation to the time spent at MGTS. These took two forms: written notes (mostly written down in the little office at the back of the MGTS Training Centre in Parkside Coventry), and taped notes, where I just spoke into a tape-recorder after getting home from research at MGTS. These notes were comments on events observed at the MGTS, on discussions with MGTS supervisors, on informal discussions with MGTS staff and apprentices in the canteen and notes of important happenings regarding training.

(ii) Pre-Research Notes

In addition there were Pre-Research Notes on interviews with MGTS recruitment and training staff and with Roger Gilbert of the CDEEA. These notes played an important part in the thesis in Parts One and Two.

C) OTHER STUDIES AND INFORMATION USED IN THE THESIS

(i) Lord Mayor's Secretariat Study of 'Traditional Coventry Apprenticeships'

Through the Chief Archivist at the Coventry Local Studies Centre (which incorporated the City Records Office and various local collections and sources of data on historical topics) I discovered that the Coventry Lord Mayor's Secretariat kept records of apprenticeship registrations under the Freedomship of the City. From August-October 1980 I spent 12 days looking at these records. The two most important entries were date of registration and

the firm's name. Data on registrations for each year during the 1971-79 period was collected.

(ii) Studies at the Coventry Local Studies Centre

Material in the Local Studies Centre was very useful in terms of attempting to trace the ways and means by which engineering employers' 'needs' were translated into 'educational programmes' (Bowles and Gintis:1976). This material was used extensively in Chapter Ten.

In particular, Minutes of the Education Committee, various Education Sub-Committees and Reports on education gave some indication of the influence of representatives of the CDEEA on the administration, policies and research initiatives of the City Council and the LEA. Newspaper cuttings also highlighted the role of the CDEEA in the education debates in the City, and more general use was made of these in relation to Chapters Eight-Ten in particular.

But the material in the Local Studies Centre also gave me a wider appreciation of developments in the Coventry labour market, developments in education and training in Coventry, the rise of the Coventry Youth Programme for the City's young unemployed since the mid-1970s and the role of the Coventry Careers Service. All this was useful background and contextual material, and much of it figured in Chapter Five.

Several visits were made to the Centre from May-October 1980, and I spent two whole weeks there in July 1981 and a further week in September 1981. Occasional visits were made during 1984-85. As I worked in the City centre at that time I spent dinner hours there. The following material was studied in depth:

Council Minutes

1. Education Committee: 1974-1985
2. Further Education Sub-Committee: 1966-1980
3. Education (Schools) Sub-Committee: 1972-1985
4. Educational Planning Sub-Committee: 1967-1980

5. Teachers (F.E.) Consultative Joint Committee: 1975-1976
6. Governors of the Technical College, Henley College and Tile Hill College: 1964-1971.
7. Youth Employment Sub-Committee: 1963-1973
8. Youth Employment Service Annual Reports: 1953-1967 (not complete).

'Coventry Evening Telegraph'

Back numbers using the Local Studies Centre 'Coventry Evening Telegraph' Index. Especially the following topics: Coventry Employment; Coventry AEU; Coventry Apprentices' Association; Coventry & District Engineering Employers' Association; Coventry Education; Coventry Education (Vocational); and material on firms in the CEES. The period 1955-1979 was examined using the Index. All 'Telegraphs' from 1976-1979 were looked at.

Cuttings on Apprenticeships in Coventry (JN.331.861), from various sources collected by the Local Studies Centre staff.

Reports produced by Coventry Local Education Authority, Statistical Reports produced by the West Midlands County Council and various reports from the Coventry Community Development Project.

(iii) CDEEA - Internal Papers on Education and Training

Through my contacts with Roger Gilbert, CDEEA Training Executive, I obtained some internal papers on education and training, as well as engineering apprenticeship numbers in Coventry based on the CDEEA's surveys. I deposited two of these papers in the Modern Records Centre in the University of Warwick Library.

(iv) Newspapers and Newspaper Cuttings

During the 1980-85 period I collected 15 arch files and 5 box files of newspapers and cuttings. The arch files contained cuttings on education and training, youth unemployment and Government schemes for the young unemployed. Cuttings from 'The Guardian', 'The Times', 'The Times Educational Supplement' comprised ten of these files. Cuttings from the 'Coventry Evening Telegraph' went into the other five arch files. Material on firms in the CEES, and developments in the local economy was gathered as well as stuff on education and training in Coventry.

Two of the box files contained issues of the 'Jobhunter', a weekly newspaper for Coventry's school leavers, 5th/6th formers and the young unemployed produced by Coventry Careers Service. About half of my collection was obtained from Peter Ratcliffe, lecturer in the Warwick Sociology Department. The rest were collected by myself from the Precinct Post Office and the Careers Centre where they were displayed weekly.

The other three box files were filled with copies of 'Central Midlands Enterprise' from 1980-1985. For these, I wangled my way onto the subscribers list in 1981 - before then I picked up free copies from the University's foyer in Roots Hall. The 'Education and Training' section was particularly useful.

Simon Frith also supplied me with a file on education, training and youth unemployment cuttings from various newspapers, but especially from the 'Coventry Evening Telegraph', covering the 1977-80 period. Finally, I collected a file of material on 'Education in Coventry' which was put together from various sources by staff in the Institute of Education Library of the University of Warwick, Westwood Site.

(v) Employers, Trade Unions and Training in the Engineering Industry - Readings from Engineering Employers' Federation, Coventry & District Engineering Employers' Association, the Confederation of Shipbuilding and Engineering Unions and the Amalgamated Union of Engineering Workers Union

material deposited in the Modern Records Centre, University of Warwick Library.

This material was examined intermittently throughout the February 1981-June 1982 period.

(vi) Engineering Careers Exhibition, 12/11/1980 (Coventry Polytechnic)

This was an exhibition designed to introduce school pupils to careers in the local engineering industry. It was sponsored by the CDEEA, the Coventry Chamber of Commerce and Industry, Coventry and Warwickshire Careers Services and the Engineering Industry Training Board, and was held at the Coventry Polytechnic from 11-12th November 1980. Most of the firms present at the Exhibition were large firms based in Coventry.

My visit, on the second day, resulted in several conversations with employers at the stands, (on which I made notes as soon as I left the Exhibition), and brief case full of recruitment booklets.

(vii) Information deriving from my time as Research Officer (MSC Programmes) in Coventry Education Department, 1982-1985

From October 1982 to September 1985 I worked as a Research Officer (MSC Programmes) in Coventry Education Department. I collected a substantial amount of material during this time on youth unemployment in Coventry, the Coventry youth labour market and Government sponsored schemes for unemployed youth in the City. This material is too extensive to summarise here, but without it Chapter Five would never have been written.

APPENDIX 2THE MGTS RECRUITMENT PROCEDURE

The following description of the role that MGTS plays in the recruitment of engineering apprentices for member firms is based on research notes taken from an interview with Ken Wardle, MGTS recruitment officer on 16th May 1980. This description is followed by photocopies of the application form and a few of the other most important formatted items used as part of the MGTS recruitment procedure.

Pre-recruitment work

MGTS training officers make preliminary visits to schools in the Autumn term; usually about forty visits a year to Coventry and Warwickshire schools. Training officers give talks about getting a job in engineering and the various trades young people can go into. Then, in December and January, MGTS training officers write to and then visit member companies and discuss how many apprentices and operatives are needed. On apprentices, they ask whether these are craft or technician and for what trade or areas (if known).

Application forms for MGTS are sent to schools and Careers Officers in Coventry, Nuneaton, Rugby, Leicester, Stratford, Kenilworth, Warwick and Leamington. Advertisements are placed in the local press and the 'Jobhunter' - a weekly newspaper for the young unemployed, school leavers and fifth and sixth formers. Another form of advertising is the Careers Convention - an exhibition of firms in the area, (what they do, what young people can do in particular firms...etc.), which take place in schools and run for a day, including the evening so that parents can go along. MGTS go to about twelve of these a year in schools throughout Coventry and Warwickshire.

There are also Joint Seminars every year, (usually in the early Spring), which are held in the Careers Offices in Coventry and Warwickshire. These are attended by teachers' representatives, Careers Officers and employers.

Here general and particular problems of recruitment are discussed and plans for Careers Conventions and Exhibitions are established. From 1979 the Careers Service in Coventry and the CDEEA ran an Exhibition on 'Careers in Engineering' in the Coventry Polytechnic sports hall. Local firms put on displays and send along representatives to discuss apprentice and other training within their firms. The exhibition lasts three days and parties of school pupils from the third year of secondary schooling come during the daytime and parents and sons/daughters in the evening.

Recruitment

After applicants write in requesting forms they get a letter explaining that they have to do a simple aptitude test, a leaflet which explains what MGTS do (which includes a list of member firms), and application forms. The application form has the following sections: Personal Details; Health; Education (examinations being taken); Previous Employment; Activities/Hobbies; A section on 'Why are you interested in Engineering?'; and background information on Parents/Guardians (for example, occupation) - (see the actual form used on pp548-549). There is a 'Standard Reject Letter' which may be sent out at any stage, sometimes even before forms are filled in as the letter of application may be so poor.

Applicants send back the forms and either receive an acknowledgement or a Standard Rejection Letter. For the former, MGTS write to the applicant's school and ask for a standard School Report, although the school decides who fills them in. The standard report form has the following sections on it: Personal Details; Subjects being studied and exams being taken; Participation in 'Other school activities'; Posts of responsibility; Potential for further full-time or part-time study; General character, disposition and temperament; Any other relevant information. From this some get Standard Reject Letters and the rest are sent a letter inviting them to attend MGTS for tests.

Birkbeck B1-B5 tests are used. They include the following elements: General Intelligence; Simple arithmetic; Simple mathematics; Mechanical physics; Spatial conjunction. It lasts 1½ hours. A card is sent out to four firms in the City to check that the applicants have not already done the test there.

Successful applicants from the tests then come to MGTS for interview. They are told that they can bring parents/guardians if they wish, but that for most of the interview they will be on their own. They are also asked to bring along some examples of practical work and 'any exercise books you consider relevant'. The interviews are held in the Careers Offices as it is 'neutral territory'. During the interview an Interview Record is filled in by the training officer involved. The Interview Record has the following sections on it: Educational attainments; Spare time interests and hobbies; Previous Employment; Health and physical make-up; Domestic circumstances; Acceptability and reliability; General impression; Recommendations (i.e. what type of apprenticeship, firm and trade they are best suited to).

MGTS then telephone the firms and arrange interviews for the young people. They notify the firms by letter as well, saying that they have found suitable candidates and that they are sending them for interview. Photocopies of the Application Forms, School Reports and Interview Records are sent to the firms for each candidate having an interview at particular firms. Letters are sent to the young people who are going to be interviewed by particular firms, asking them to go to firm 'X' on a certain date and time. The firms are also sent a form which they return to MGTS after they have a particular young person indicating: 1. Acceptance/rejection; 2. Whether accepted candidates are going to do off-the-job training with MGTS and; 3. What type of job the young person has been taken on for.

The following are copies of three of the main administrative items used in the MGTS recruitment procedure; the application form, the standard school report form and the interview record form. All items have been photocopied 75% of their original size.

1. MIDLAND GROUP TRAINING SERVICES - APPLICATION FORM (Side Two).

Write in this space why you are interested in a career in Engineering or Office Work

Midland Group Training Services and Career Service use only

COMPANY INTERVIEW	1	2	3
COMPANY			
CONTACT			
DATE/TIME			
TYPE OF TRAINING			

NOTES

ON COMPLETION RETURN THIS FORM TO

The Recruitment Officer
Midland Group Training Services Limited
33 Parkside
COVENTRY CV1 2NE
Telephone Coventry (0203) 52191

2. MIDLAND GROUP TRAINING SERVICES - STANDARD SCHOOL REPORT FORM

SPW No. 105


MIDLAND GROUP TRAINING SERVICES LIMITED

Please return to:
Midland Group Training
Services Ltd
33 Parkside
Coventry CV1 2NE

Surname:		School:	
Other Names:		House:	
Leaving Date:		Form:	
SUBJECTS OF PRESENT SCHOOL COURSE Subject:	Exam in View (and Mode, 1,2 or 3)	Results Expected	Additional Comments
PARTICIPATION IN OTHER SCHOOL ACTIVITIES (Sport, Societies etc.)			
PARENTAL INTEREST AND SUPPORT			
ATTENDANCE AND PUNCTUALITY			
POSTS OF RESPONSIBILITY (Please comment on effectiveness)			
POTENTIAL FOR FURTHER FULL TIME OR PART TIME STUDY			
GENERAL CHARACTER, DISPOSITION AND TEMPERAMENT			
ANY OTHER RELEVANT INFORMATION			

Signed Position Held Date

3. MIDLAND GROUP TRAINING SERVICES - INTERVIEW RECORD FORM

INTERVIEW RECORD		NAME
		DATE OF INTERVIEW
<u>EDUCATIONAL ATTAINMENTS</u>	<u>SPARE TIME INTERESTS AND APTITUDES</u>	
<u>PREVIOUS EMPLOYMENT</u>	<u>HEALTH AND PHYSICAL MAKE-UP</u>	
<u>DOMESTIC CIRCUMSTANCES</u>	<u>ACCEPTABILITY AND RELIABILITY</u>	
<u>GENERAL IMPRESSION</u>	<u>RECOMMENDATION</u>	
 Midland Group Training Services Limited 33 Parkside Coventry CV1 2NE Telephone: Coventry 82181	SIGNED	

APPENDIX 3INTERVIEW SCHEDULES AND 'LETTER OF INTRODUCTION'

This appendix sets out the interview schedules used in the CEES and the Apprentices' Study. It also gives the 'Letter of Introduction' sent to engineering firms requesting an interview on apprentice recruitment.

A - THE COVENTRY ENGINEERING EMPLOYERS' STUDY INTERVIEW SCHEDULE

UNIT I [For all CEES firms] - Basic Information

Q1: Do you employ young people here?

Q2: How many apprentices do you have?

How many office juniors, (under 18), do you have?

How many operatives/trainees, (under 18), do you have?

How many unskilled/labourers, (under 18), do you have?

Q3: How old is the company?

Q4: How old is the factory?

How long have you been on this site?

Q5: What sorts of products are made here?

Q6: How many workers do you employ here altogether?

How many are skilled craftsmen?

Q7: Does the owner/company have factories elsewhere?

(If 'yes') Where?

Q8: Who basically owns the enterprise?

Q9: What trade unions do you have here?

What percentage of the workforce are in unions?

Are there any closed shop areas? (If 'yes' : Which areas?)

Q10: What hours do people work here - daily, and weekly?

Q11: Is there a shift system?

Q12: Which types of production or technology are used in your firm -

Commercial work?

Service?

Continuous flow/process?

Mass production?

Large batch?

Small batch?

Fabrication/Assembly?

Single pieces?

Maintenance/servicing/repairs, (of your own machines)?

Q13: What percentage of your machines, (milling, grinding, lathes and so on) are based on imperial measurements?

Q14: How many people, (including secretarial staff), work in the Personnel Department here?

Q15: Who is responsible for recruiting apprentices here?

Who is responsible for recruiting office juniors here?

Who is responsible for recruiting operatives/trainees here?

Who is responsible for recruiting young unskilled/labourers here?

Q16: Which staff participate in training here?

Do apprentices go on first year off-the-job training? (If 'yes' Where?)

Do apprentices go on day/block release?

Q17: Do you use MGTS for training apprentices in any way?

[If 'yes' > Review of training arrangements in relation to MGTS]

Q18: Do you use MGTS for the recruitment of apprentices?

[If 'yes' > Review of recruitment arrangements in relation to MGTS]

Q19: Are you a Federated firm?

UNIT IIa [For Non-MGTS firms only] - On Apprentice Recruitment

Q1: How many craft apprentices do you have?

How many technician apprentices do you have?

How many commercial apprentices do you have?

Are there any other types of apprentices here?

(If 'yes' - (i) What are they?

(ii) How many do you have?)

Q2: What types of craft apprentices do you have here - in terms of the areas or trades they go into?

What types of technician apprentices do you have here - in terms of the areas they go into?

[Note: at this point ask if the procedure for recruiting craft and technician apprentices is basically the same. If there are substantial differences then ask separate questions for craft and technician at the relevant points]

ADVERTISING

Q3: Which of the following do you use for advertising your apprenticeships-

Newspapers?
Employment Agencies?
Schools?
Colleges?
Careers Centres?
Jobcentres?
In the factory?
Anywhere else?

Q4: From your experience of recruiting apprentices where do applicants most commonly first find out about your apprenticeships?

CASUAL APPLICANTS AND RECRUITS

Q5: How often in the last year have you had young people calling round for a job 'just on the off-chance'?

What jobs were they looking for?

Have young people ever got apprenticeships this way?

Q6: How often in the last year have you had a father and son come here to enquire about apprenticeships?

Have young people ever got apprenticeships this way?

APPLICATION FORMS

Q7: Do you have:

Standard forms (for all youth jobs)?

Separate forms (clerical, manual, apprentices)?

Q8: Do you ever reject an application for an apprenticeship on the basis of the form alone?

What factors lead you to reject on the form?

When you were recruiting apprentices last year, how many applications did you reject on the basis of the form alone?

(If 'none', or did not recruit last year, then: When was the last time you had to do this?)

What was it about the form that caused you to reject the applicant?

CAREERS SERVICE

Q9: Do you ever use the Careers Service for the recruitment of apprentices?

(If 'yes' - Is this as a matter of course, something you normally do?)

Q10: Do they pre-select applicants for you, or do they just send anybody down here who is interested in your apprenticeships?

Q11: (If 'yes' to pre-selection - How do they select potential apprentices out for you; on what basis do they pre-select?)

INTERVIEWS

Q12: When you are interviewing a young person for an apprenticeship, are there any questions which you usually ask?

Could you give me some examples of these questions?

Q13: When you are interviewing a young person for an apprenticeship, do you ask similar types of questions to both young men and young women?

Q14: How long do interviews for apprenticeships last on average?

Q15: Do you ever have more than one interview?

(If 'yes' - In what circumstances?)

TESTS

Q16: Do you use any form of test in the recruitment of your apprentices?

(If 'yes' - How many?)

Q17: What type of tests are they?

What skills do they test?

Q18: How long do they last?

Q19: Do they come before or after the interview?

Q20: Do you ever have more than one set of tests?

(If 'yes' - Why is this?)

Q21: Are the test scores more or less important in the selection of apprentices than the interview performance?

SHORTLISTS

Q22: Are shortlists drawn up at any stage in the selection of apprentices?

(If 'yes' - At what stage?)

MEDICAL EXAMINATION

Q23: Do you give potential apprentices a medical examination before you take them on?

Q24: (If 'yes' to 23 - At what stage in the selection process does the

medical examination come?)

Q25: Has it ever led to any rejections?

MANUAL DEXTERITY TESTS

Q26: Do you have any manual dexterity tests for apprenticeships?

Q27: (If 'yes' to 26 - What sort of tests are they?)

Q28: Where do they come in the selection process?

SCHOOL REPORTS, EXAMINATIONS AND CONTACTING TEACHERS

Q29: When you are assessing a young person for an apprenticeship do you take any of the following into account?

1. School Reports?

2. Public examinations/Projected Grades?

Q30: Have you ever written to Headmasters about particular young people that are applying for apprenticeships?

(If 'yes' - In what circumstances have you done this?)

Q31: Have you ever telephoned Headmasters to ask questions about a young person that is applying for an apprenticeship?

(If 'yes' - In what circumstances have you done this?)

INFORMATION ON THE FIRM AND THE APPRENTICESHIP

Q32: When you send out application forms to a young person who wants to apply for an apprenticeship, do you:

1. Send out information about the apprenticeship?

2. Send out information about the firm?

Q33: Do you send out information about your firm to:

1. Schools?

2. Careers Offices?

PERSONNEL INVOLVED IN THE RECRUITMENT OF APPRENTICES

Q34: When you are recruiting apprentices, do other managers and supervisors ever give suggestions or make recommendations as to the sort of person the firm ought to be taking on?

Q35: Is there any participation of trade union officials or shop stewards in the recruitment of apprentices?

(If 'yes' - In what ways do they participate?)

How long has such participation been going on?)

Is there any informal consultation between yourself and unions as to the numbers of apprentices taken on each year?

Q36: Does anyone sit in on interviews for apprenticeships other than yourself? (If 'yes' - Which people?)

Q37: Are the tests designed in the factory?

(If 'yes' - Who designs them?)

Who decides on the aims and objectives of the tests?)

[REVIEW: Quickly go over steps in the recruitment process with the interviewee to make sure that the order is correct]

CHANGES

Q38: Have there been any changes in your methods of recruitment of apprentices in the last five years?

(If 'yes' - What were these changes?

Why were these changes brought in?)

WHENS AND WHERE OF APPRENTICE RECRUITMENT

Q39: When do you recruit your apprentices? What time of the year do you start recruitment, and when do you finish?

Q40: How many last year did not come straight from school?

Q41: What percentage of your craft and technician apprentices have relations working here?

Q42: Do most of your apprentices live within two miles of the works?

ON THE LEVEL OF APPRENTICE RECRUITMENT

Q43: How many first year, second year, third and final year apprentices do you have?

Q44: Will you be recruiting more or less apprentices next year?

Q45: How does the firm decide how many apprentices are taken on each year -

What is the procedure?

What factors are taken into account in deciding how many to recruit?

Which groups of people contribute to the final decision as to how many are taken on?

Is the Cost of apprentice training an important factor in deciding how

many apprentices are taken on each year?

How much are first year apprentices paid weekly?

SEX, RACE AND AGE

Q46: How many female apprentices do you have?

Q47: How many West Indian apprentices do you have?

Q48: How many Asian apprentices do you have?

Q49: At what age do you take on apprentices?

Q50: In the last two years how many have you taken on that were at least a year older than normal?

EMPLOYERS' NEEDS (GENERAL)

Q51: What are you looking for in a young person who applies for an apprenticeship in your firm? (Please note any differences between craft and technician on this)

Q52: Are 'first impressions' important for you in the recruitment of apprentices?

QUALIFICATIONS

Q53: When you recruit craft apprentices what academic qualifications do you ask for? (in terms of subjects and grades)

When you recruit technician apprentices what academic qualifications do you ask for? (in terms of subjects and grades)

SCHOOL REPORTS (HOW THEY ARE USED)

Q54: When you are selecting an apprentice, and you are reading through his/her school report, what sorts of things do you notice in the report that indicates he/she is likely to make a good apprentice?

Q55: When you are selecting an apprentice, and you are reading through his/her school report, what sorts of things do you notice in the report that indicates he/she will not make a good apprentice?

NUMERACY

Q56: [See overleaf]

Q57: From your own experience of recruiting apprentices have you found that young people coming from school have improved in any of these mathematical skills over the last five years?

(If 'yes' - Which of these skills in particular?)

Q58: From your own experience of recruiting apprentices have you found that young people coming from school have deteriorated in any of these mathematical skills over the last five years?

(If 'yes' - Which of these skills in particular?)

Q59: Is knowledge of both imperial and metric measurements either essential or desirable (or neither) for the apprentices that you recruit?

Q60: Do craft have to do conversions on the shopfloor or are they done in the drawing office or elsewhere?

Q56: In selecting apprentices, which of the following mathematical skills do you expect them to have when they present themselves for interview?
(Please not any differences as between craft and technician)

(Interviewees either given separate sheets for craft and technician or told to write 'C' or 'T' in each box when the same sheet used)

	YES	NO
1. Addition/Subtraction.....
2. Multiplication/Division.....
3. Ability to memorise (X2-X12) tables.....
4. Ability to Add and Subtract mentally.....
5. Ability to Divide and Multiply mentally.....
6. Addition/Subtraction of Decimals.....
7. Percentages.....
8. Conversion of fractions to decimals.....
9. Use of Reference Tables.....
10 Addition/Subtraction of fractions.....
11 Multiplication/Division of fractions.....
12 Transposition of formulae.....
13 Use of Pi.....
14 Square Roots.....
15 Trigonometry.....

Q61: Where do you look for evidence of these skills?

LITERACY AND LANGUAGES

Q62: When you are selecting apprentices which of the following skills do you look for -

1. Clarity of handwriting?
2. Punctuation?
3. Spelling?
4. Composition?

Q63: Where do you look for evidence of these skills?

Q64: Do you demand that your apprentices have knowledge of any foreign languages?

PHYSICAL QUALITIES

Q65: What physical abilities do you look for when you are selecting for apprentices -

1. Ability to lift?
2. Good eyesight?
3. Good hearing?
4. Manual dexterity?
5. Any other? (specify)

Q66: Where do you look for evidence of these physical abilities?

SOCIAL SKILLS

Q67: What social skills do you look for in a potential apprentice when you are recruiting

Q68: Where do look for evidence of these skills?

EXPERIENCE

Q69: When you are assessing a young person for an apprenticeship do you take any of the following into account - would it be to a young person's advantage, when it comes to selection for apprenticeships, to have done.....

1. A Work Experience course at school, (working for a few weeks in an industrial or commercial organisation during school time in the fourth or fifth year?

2. Holiday jobs? (in Summer, Easter holidays)
3. Saturday jobs?
4. Evening classes?
5. (to have been a...) Member of Clubs, Societies at school?
6. (to have...) Leisure pursuits - Hobbies and Interests, outside school?

RECRUITMENT METHODS

Q70: In the selection of apprentices, which of the following plays the most decisive role in the assessment of a young person's ability to be a good apprentice -

The interview, school report, Headmaster's (verbal) comments, test performances, examination results or projected grades or any other element? (If the last - Ask to specify)

FAMILY

Q71: Do you make any efforts to enquire into the family situation of applicants for apprenticeships?

(If 'yes' - How?)

Do you ask parents to come along to the interview?

(If 'yes' - Why?)

STATUS OF APPRENTICESHIPS

Q72: Are your apprenticeships indentured ones (deeds of apprenticeship drawn up and so on)?

Is there a probationary period for the apprenticeship before the indentures are drawn up?

(If so - How long is it?)

WHAT CAN SCHOOLS DO?

Q73: What could schools do to more adequately prepare young people for apprenticeships in your firm?

UNIT IIB [For MGTS firms only] - On Apprentice Recruitment

Q1: How many craft apprentices do you have?

How many technician apprentices do you have?

How many commercial apprentices do you have?

Are there any other types of apprentices here?

(If 'yes' - (i) What are they?

(ii) How many do you have?)

Q2: What types of craft apprentices do you have here - in terms of the areas or trades they go into?

What types of technician apprentices do you have here - in terms of the areas they go into?

[Note: at this point ask if the procedure for recruiting craft and technician apprentices is basically the same. If there are substantial differences then ask separate questions for craft and technician at the relevant points]

MGTS

Q3: Do you recruit apprentices through any source other than MGTS?

(If 'yes' - Where?)

Why do you recruit through these sources?

CASUAL APPLICANTS AND RECRUITS

Q4: How often in the last year have you had young people calling round for a job 'just on the off-chance'?

What jobs were they looking for?

Have young people ever got apprenticeships this way?

Q5: How often in the last year have you had a father and son come here to enquire about apprenticeships?

Have young people ever got apprenticeships this way?

INTERVIEWS

Q6: When you are interviewing a young person for an apprenticeship, are there any questions which you usually ask?

Could you give me some examples of these questions?

Q7: When you are interviewing a young person for an apprenticeship, do you ask similar types of questions to both young men and young women?

Q8: How long do interviews for apprenticeships last on average?

Q9: Do you ever have more than one interview?

(If 'yes' - In what circumstances?)

TESTS

Q10: Which do you take to be the most important score on the MGTS B1-B5 tests? (General Intelligence, Mechanical Physics, Simple Maths, Simple Arithmetic, Spatial Conjunction)

a. For Craft apprentices

b. For Technician apprentices

Q11: Do you have any tests of your own?

Q12: Are the test scores more or less important in the selection of apprentices than interview performance?

Q13: Do you ever take on anyone who doesn't come up to the required standard in the tests?

(If 'yes' - Why do you do this?)

SHORTLISTS

Q14: Are shortlists drawn up at any stage in the selection of apprentices?

(If 'yes' - At what stage?)

MEDICAL EXAMINATION

Q15: Do you give potential apprentices a medical examination before you take them on?

Q16: (If 'yes' to 15 - At what stage in the selection process does the medical examination come?

Q17: Has it ever led to any rejections?

MANUAL DEXTERITY TESTS

Q18: Do you have any manual dexterity tests for apprenticeships?

Q19: (If 'yes' to 18 - What sort of tests are they?)

Q20: Where do they come in the selection process?

CONTACTING TEACHERS

Q21: Have you ever written to Headmasters about particular young people that are applying for apprenticeships?

(If 'yes' - In what circumstances have you done this?)

Q22: Have you ever telephoned Headmasters to ask questions about a young person that is applying for an apprenticeship?

(If 'yes' - In what circumstances have you done this?)

INFORMATION ON THE FIRM

Q23: Do you send out information about your firm to:

1. Schools?
2. Careers Offices?

PERSONNEL INVOLVED IN THE RECRUITMENT OF APPRENTICES

Q24: When you are recruiting apprentices, do other managers and supervisors ever give suggestions or make recommendations as to the sort of person the firm ought to be taking on?

Q25: Is there any participation of trade union officials or shop stewards in the recruitment of apprentices?

(If 'yes' - In what ways do they participate?

How long has such participation been going on?)

Is there any informal consultation between yourself and unions as to the numbers of apprentices taken on each year?

Q26: Does anyone sit in on interviews for apprenticeships other than yourself? (If 'yes' - Which people?)

[REVIEW: Quickly go over steps in the recruitment process with the interviewee to make sure that the order is correct]

CHANGES

Q27: Have there been any changes in your methods of recruitment of apprentices in the last five years?

(If 'yes' - What were these changes?

Why were these changes brought in?)

WHENS AND WHERE OF APPRENTICE RECRUITMENT

Q28: When do you recruit your apprentices? What time of the year do you start recruitment, and when do you finish?

Q31: What percentage of your craft and technician apprentices have relations working here?

Q32: Do most of your apprentices live within two miles of the works?

ON THE LEVEL OF APPRENTICE RECRUITMENT

Q33: How many first year, second year, third and final year apprentices do you have?

Q34: Will you be recruiting more or less apprentices next year?

Q35: How does the firm decide how many apprentices are taken on each year - What is the procedure?

What factors are taken into account in deciding how many to recruit?

Which groups of people contribute to the final decision as to how many are taken on?

Is the Cost of apprentice training an important factor in deciding how many apprentices are taken on each year?

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apprentices?

QUALIFICATIONS

Q43: When you recruit craft apprentices what academic qualifications do you ask for? (in terms of subjects and grades)

When you recruit technician apprentices what academic qualifications do you ask for? (in terms of subjects and grades)

SCHOOL REPORTS (HOW THEY ARE USED)

Q44: When you are selecting an apprentice, and you are reading through his/her school report, what sorts of things do you notice in the report that indicates he/she is likely to make a good apprentice?

Q45: When you are selecting an apprentice, and you are reading through his/her school report, what sorts of things do you notice in the report that indicates he/she will not make a good apprentice?

NUMERACY

Q46: [See overleaf]

Q47: From your own experience of recruiting apprentices have you found that young people coming from school have improved in any of these mathematical skills over the last five years?

(If 'yes' - Which of these skills in particular?)

Q48: From your own experience of recruiting apprentices have you found that young people coming from school have deteriorated in any of these mathematical skills over the last five years?

(If 'yes' - Which of these skills in particular?)

Q49: Is knowledge of both imperial and metric measurements either essential or desirable (or neither) for the apprentices that you recruit?

Do craft have to do conversions on the shopfloor or are they done in the drawing office or elsewhere?

Q50: Where do you look for evidence of these skills?

Q46: Numeracy skills

In selecting apprentices, which of the following mathematical skills do you expect them to have when they present themselves for interview?
(Please note any differences as between craft and technician)

(Interviewees either given separate sheets for craft and technician or told to write 'C' or 'T' in each box when the same sheet used)

	YES	NO
1. Addition/Subtraction.....
2. Multiplication/Division.....
3. Ability to memorise (X2-X12) tables.....
4. Ability to Add and Subtract mentally.....
5. Ability to Divide and Multiply mentally.....
6. Addition/Subtraction of Decimals.....
7. Percentages.....
8. Conversion of fractions to decimals.....
9. Use of Reference Tables.....
10 Addition/Subtraction of fractions.....
11 Multiplication/Division of fractions.....
12 Transposition of formulae.....
13 Use of Pi.....
14 Square Roots.....
15 Trigonometry.....

LITERACY AND LANGUAGES

Q51: When you are selecting apprentices which of the following skills do you look for -

1. Clarity of handwriting?
2. Punctuation?
3. Spelling?
4. Composition?

Q52: Where do you look for evidence of these skills?

Q53: Do you demand that your apprentices have knowledge of any foreign languages?

PHYSICAL QUALITIES

Q54: What physical abilities do you look for when you are selecting for apprentices -

1. Ability to lift?
2. Good eyesight?
3. Good hearing?
4. Manual dexterity?
5. Any other? (specify)

Q55: Where do you look for evidence of these physical abilities?

SOCIAL SKILLS

Q56: What social skills do you look for in a potential apprentice when you are recruiting

Q57: Where do look for evidence of these skills?

EXPERIENCE

Q58: When you are assessing a young person for an apprenticeship do you take any of the following into account - would it be to a young person's advantage, when it comes to selection for apprenticeships, to have done.....

1. A Work Experience course at school, (working for a few weeks in an industrial or commercial organisation during school time in the fourth or fifth year) ?
2. Holiday jobs? (in Summer, Easter holidays)
3. Saturday jobs?

4. Evening classes?
5. (to have been a...) Member of Clubs, Societies at school?
6. (to have...) Leisure pursuits - Hobbies and Interests, outside school?

RECRUITMENT METHODS

Q59: In the selection of apprentices, which of the following plays the most decisive role in the assessment of a young person's ability to be a good apprentice -

The interview, school report, Headmaster's (verbal) comments, test performances, examination results or projected grades or any other element? (If the last - Ask to specify)

FAMILY

Q60: Do you make any efforts to enquire into the family situation of applicants for apprenticeships?

(If 'yes' - How?)

Do you ask parents to come along to the interview?

(If 'yes' - Why?)

STATUS OF APPRENTICESHIPS

Q61: Are your apprenticeships indentured ones (deeds of apprenticeship drawn up and so on)?

Q62: Is there a probationary period for the apprenticeship before the indentures are drawn up?

(If so - How long is it?)

WHAT CAN SCHOOLS DO?

Q63: What could schools do to more adequately prepare young people for apprenticeships in your firm?

B - APPRENTICES' STUDY - Shopfloor Interview Schedule

A) ENTERING ENGINEERING

- Q1: What firm are you with?
- Q2: How did you get to know about the apprenticeships they were offering?
(If answer was 'through MGTS' then - How did you get to know about MGTS?)
- Q3: Did you have an interview with the firm?
a) Did they ask your parents to come along?
b) What sorts of questions did they ask?
- Q4: How did you become interested in engineering?
(If more than one factor influenced their interest in engineering then ask - Which factor influenced you most?)

B) AT SCHOOL

- Q5: Did you do metalwork, craft, design or technology at school?
(If 'yes' - Which years?)
- Q6: Have you found what you did in those lessons useful in relation to what you're doing here?
(If 'yes' - How? Which aspects?)
(If 'no' - Why not?)
- Q7: Of the other subjects that you did at school, which ones have you found to be useful for what you are doing now?
(Why is 'X' useful?...etc.)
- Q8: Which of the subjects you did at school have you found to be of no use to you in your work here?
- Q9: Which of the subjects you did at school do you think will be useful in years to come for your life in general, (not just your working life)?

C) MATHS

- Q10: Did you do any trigonometry at school? (If 'yes' - What years?)
- Q11: Did you do fractions at school? (If 'yes' - What years?)
- Q12: Did you convert imperial measurements (inches, feet, yards and that) to metric, and vice versa? (If 'yes' - What years?)
- Q13: Is the Maths you do here, that you use in your work here, the same as

you did at school, or is it different in some ways?

Q14: What are the similarities between the maths you do on day release with the maths you did at school?

What are the differences?

D) CAREERS AT SCHOOL

Q15: Did you have a Careers Teacher?

Q16: Did you have any special lessons about Careers?

Q17: Did any other teachers talk to you about careers, getting a job and working life - (If 'yes' - Which teachers; what did they teach?)

Q18: Was information available (booklets. leaflets) about opportunities and jobs in different engineering firms?

Q19: Did you attend any -
Lectures/talks on engineering?
Films on engineering?

Q20: Did you visit any engineering factories?

Q21: Did you go to a Careers Convention?

Q22: Did you go on any work experience or work preparation schemes when you were at school?

E) CAREERS SERVICE

Q23: Have you ever been to your Careers Centre?
(If 'yes' - Why did you go there?)

F) BASIC INFORMATION

Age

Father's Occupation

Where do you live (i) Coventry (which area?)

(ii) Outside Coventry (where?)

School

C - 'LETTER OF INTRODUCTION' - Sent to CEES firms requesting an interview

GLENN J. RICHARDS

Research Student

Department of Sociology

University of Warwick

Coventry. CV4 7AL

Tel: Coventry (0203) 24011

Date _____

Dear _____,

I am a Research Student in the Department of Sociology at the University of Warwick. My area of research is the relationship between industry and education with specific reference to the extent to which education meets the needs of industry. I am especially interested in the skills, qualifications and qualities that employers are looking for in school leavers entering engineering apprenticeships.

I would be most pleased if I could have an interview with you about your experience of recruiting young school leavers to apprenticeships in your firm, and the particular skills, qualifications and qualities that you look for in a young person about to enter apprenticeships in your enterprise.

I hope it will not be too inconvenient if I telephone your secretary in the next few days about this request.

Yours faithfully,

Glenn Richards

APPENDIX 4: STATISTICAL APPENDIX

In this statistical appendix, Section (A) gives background information on the nature of the CEES sample. Section (B) contains additional information on the labour market in Coventry, and the youth labour market in particular, pertinent to Chapter Five. Finally, Section (C) provides the data which forms the basis of the discussion in Chapter Fifteen.

(A). THE SAMPLE**Table App4/1: TYPE OF PRODUCTION AND TECHNOLOGY USED - BY FIRM SIZE**

Types of Production and Technology used	SIZE OF FIRM					All CEES Firms (n=107)
	Group A up to 50 (n=49)	Group B 51-100 (n=13)	Group C 101-500 (n=25)	Group D 501-1000 (n=10)	Group E 1001+ (n=10)	
No. of firms with COMMERCIAL WORK	18	11	20	8	9	66
No. of firms with SERVICE WORK	17	7	9	6	8	47
No. of firms with CONTINUOUS FLOW/ PROCESS WORK	2	0	3	5	6	16
No. of firms with MASS PRODUCTION	0	3	4	4	6	17
No. of firms with LARGE BATCH PRODUCTION	7	8	12	7	6	40
No. of firms with SMALL BATCH PRODUCTION	34	12	22	7	7	82
No. of firms with FABRICATION/ASSEMBLY	35	10	20	9	8	82
No. of firms with SINGLE PIECE WORK	44	12	20	8	7	91
No. of firms with MAINTAINANCE/SERVICE and REPAIRS (of own machines)	42	11	24	10	10	97

Table App4/2: NUMBER OF APPRENTICES IN CEES FIRMS - BY SIZE GROUP

SIZE GROUPS>	Group A up to 50 (n=49)	Group B 51-100 (n=13)	Group C 101-500 (n=25)	Group D 501-1000 (n=10)	Group E 1001+ (n=10)	All CEES Firms (n=107)
ALL APPRENTICES ^a No. in each Group	123	60	248	299	1686	2416
CRAFT APPRENTICES No. in each Group	113	52	216	130	592	1103
TECH. APPRENTICES No. in each Group	10	8	29	93	587	727
MORTON JAMES PRECISION No. of Craft and Tech- nician Apprentices ^b				44		44
ALL CRAFT AND TECH- NICIAN APPRENTICES No. in each Group	123	60	245	267	1179	1874

Notes: a - Includes commercial, student and other apprentices.

b - Morton James did not distinguish between craft and technician apprentices until the third year.

Table App4/3: CRAFT AND TECHNICIAN APPRENTICES AS PERCENTAGE OF ALL CRAFT AND TECHNICIAN APPRENTICES IN EACH SIZE GROUP

SIZE GROUPS>	Group A up to 50 (n=123)	Group B 51-100 (n=60)	Group C 101-500 (n=245)	Group D 501-1000 (n=267)	Group E 1001+ (n=1179)	All CEES Firms (n=1874)
Tech. Apprentices as % of All Craft and Tech. Apprentices	8	13	12	35	50	39
Craft Apprentices as % of All Craft and Tech. Apprentices	92	87	88	49	50	59
Morton James' App- rentices as % of all Craft and Tech. Apps. ^a				16		2
TOTALS (%)	100	100	100	100	100	100

a - See note b to previous Table.

Table App4/4: NUMBER OF CRAFT AND TECHNICIAN APPRENTICES IN EACH YEAR OF TRAINING - BY SIZE OF FIRM

SIZE GROUPS> YEAR OF TRAINING	Group A up to 50 (n=123)	Group B 51-100 (n=60)	Group C 101-500 (n=245)	Group D 501-1000 (n=267)	Group E 1001+ (n=1179)	All CEES Firms (n=1874)
FIRST YEAR No. of First Year Apprentices	34	15	62	52	282	445
SECOND YEAR No. of Second Year Apprentices	31	15	67	70	342	525
THIRD YEAR No. of Third Year Apprentices	30	15	57	68	288	458
FINAL YEAR No. of Final Year Apprentices	28	15	59	77	267	446
TOTALS	123	60	245	267	1179	1874

Table App4/5: TYPES OF CRAFT TRAINING IN CEES FIRMS

TYPE OF CRAFT TRAINING SCHEME >	(1) T/R	(2) Mc/	(3) Fitt	(4) Patt	(5) S/M	(6) Elec.	(7) Maint.	(8) Sett	(9) Other
No. of firms having each type of Craft training scheme	55	54	39	14	24	28	13	7	11
% of firms with Craft training schemes having each type of scheme (n=105)	52	51	37	13	23	27	12	7	10

KEY:

- (1) Toolroom: production of specialised tools and parts. Includes machine tool manufacturers who did not have separate toolroom, but where the work was usually one-off or highly specialised.
- (2) Machine Shop: volume machining; turning, milling, grinding and drilling.
- (3) Fitting/Assembly: bench and machine tool fitting.
- (4) Patternmaking: metal, plastic, clay and wood patternmaking.
- (5) Sheet Metal and Fabrication: including panel beating and welding.
- (6) Electrical.
- (7) Maintainance: maintainance engineer/fitter.
- (8) Setter: machine setter/auto setter (on CNC and N/C machines).
- (9) Other: model making, inspection, pipe fitting, experimental auto fitters, experimental body building, quality control, cable jointer, trimming.

Table App4/6: TYPES OF TECHNICIAN TRAINING SCHEMES IN CEES FIRMS

TYPE OF TECHNICIAN TRAINING SCHEME >	General Technician	Drawing Office	Metallurgy	Electrical & Electronics	Other
No. of firms having each type of Tech- nician training scheme	38	35	6	9	11
% of firms with Technician training schemes having each type of scheme (n=52)	73	67	12	17	21

Table App4/7: WHERE AND WHETHER CEES FIRMS HAD FIRST YEAR OFF-THE JOB TRAINING FOR APPRENTICES

Where and Whether CEES Firms had Off- the-Job Training	WHERE				WHETHER	
	MGTS	Own Training School/ Section	Technical College	Elsewhere	Total having off-the job training	Total NOT having off-the job training
Firm Size						
Group A, up to 50 (n=49), No. of firms	14	0	4	1	19	30
Group B, 51-100 (n=13), No. of firms	10	0	1	2	13	0
Group C, 101-500 (n=25), No. of firms	15	1	8	0	24	1
Group D, 501-1000 (n=10), No. of firms	4	3	4	1	10 ^a	0
Group E, 1001+ (n=10), No. of firms	1	9	2	0	10 ^b	0
TOTALS	44	13	19	4	76	31

Notes:

a - Carbitool Ltd. sent their laboratory technicians to their own research division for part of their training after starting them off at MGTS. S.D. Machine Tools sent their craft apprentices to a training school and their technician apprentices to technical college.

b - Minex sent some of their mechanical technicians to MGTS and some to their own training school, whilst the telecommunications technicians went to their training school and their craft apprentices to technical college.

Table App4/8 : WHETHER CEES FIRMS USED MGTS FOR RECRUITMENT - BY SIZE GROUP

SIZE GROUPS>	Group A up to 50 (n=49)	Group B 51-100 (n=13)	Group C 101-500 (n=25)	Group D 501-1000 (n=10)	Group E 1001+ (n=10)	All CEES Firms (n=107)
<u>MGTS</u>						
No. of firms using MGTS	15	11	17	4	0	47
Percentage using MGTS	31	85	68	40	0	44
<u>NON-MGTS</u>						
No. of firms NOT using MGTS	34	2	8	6	10	60
Percentage NOT using MGTS	69	15	32	60	100	56

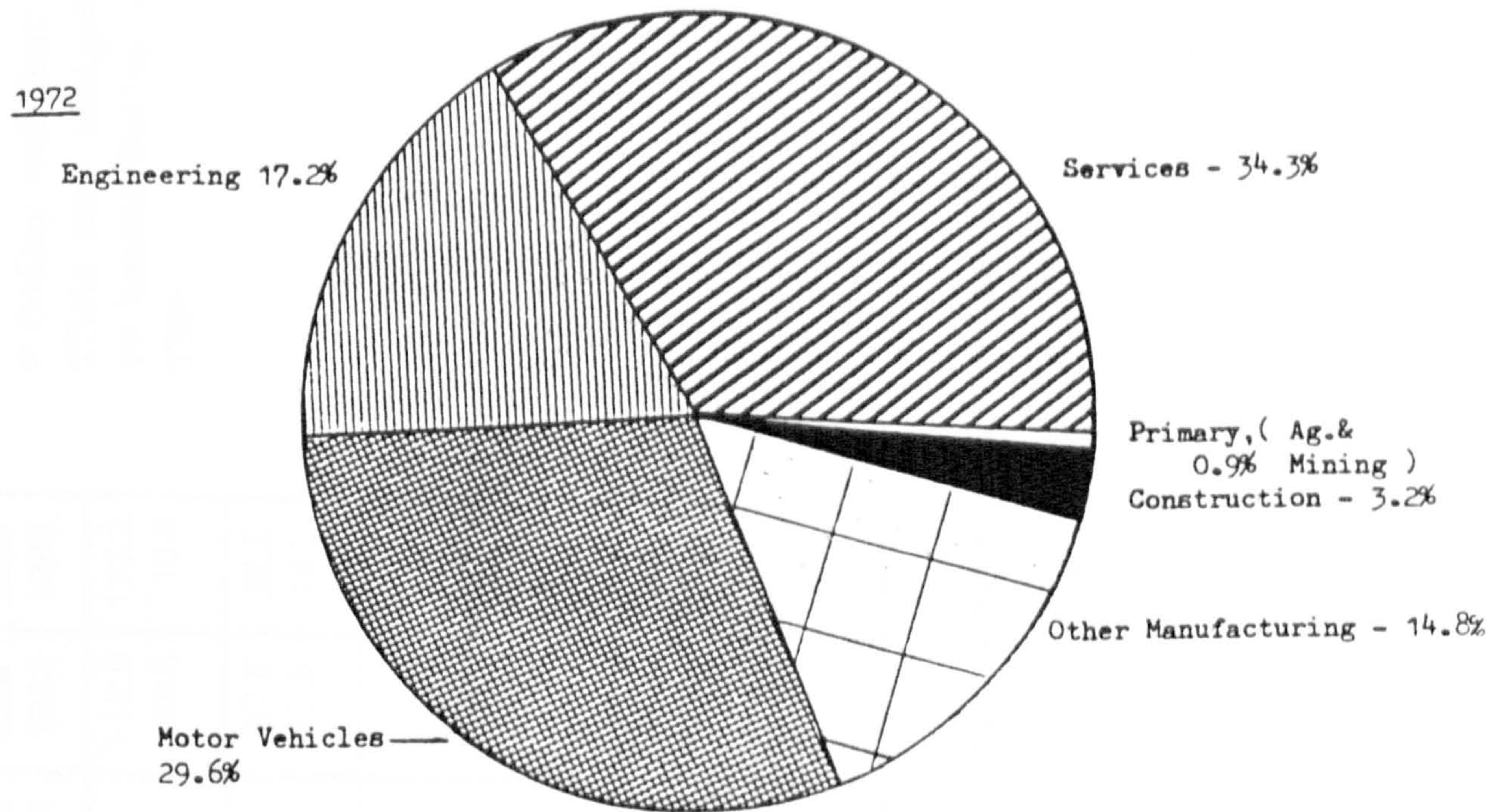
Table App4/9 : THE MEMBERSHIP OF THE MIDLAND GROUP TRAINING SERVICES - BY AREA

AREA	NUMBER OF MEMBER FIRMS	PERCENTAGE OF MEMBER FIRMS IN EACH AREA
1. Coventry	58	38
2. Exhall	13	9
3. Nuneaton, Bedworth & Hinckley	8	5
4. Leicester, Loughborough & Hucknall	5	3
5. Rugby, Wolston & Brandon	11	7
6. Warwick	14	9
7. Leamington Spa	6	4
8. Kenilworth	8	5
9. Southam & Easthorpe	3	2
10 Shipston-on-Stour	3	2
11 Aldridge, Birmingham, Dudley, Telford, Newport	9	6
12 Stratford-on-Avon & Henley-in-Arden	8	5
13 Redditch, Salford Priors & Worcester	5	3
TOTAL	151	98

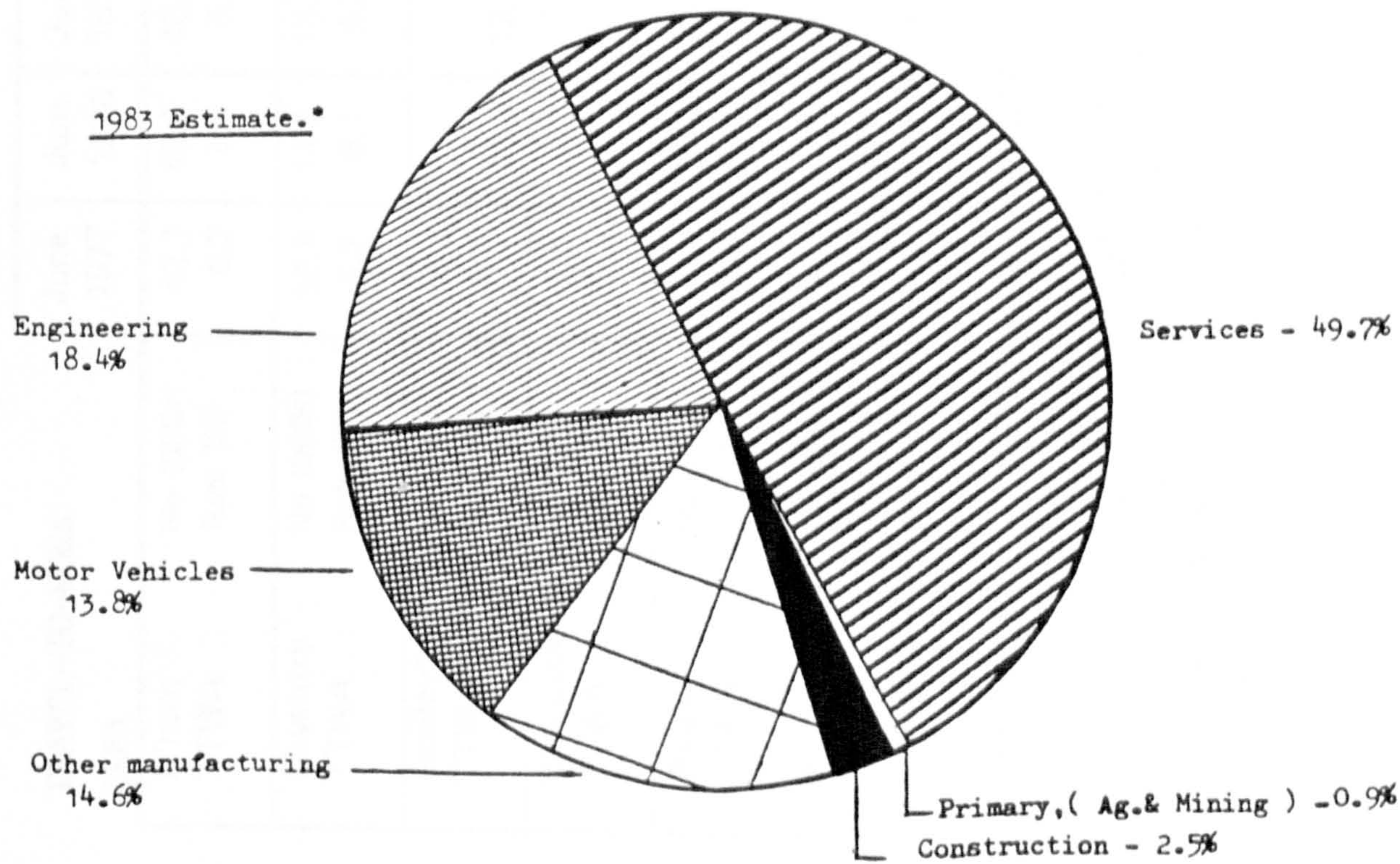
Source: (MGTS:1980).

(B). DATA ON THE GENERAL AND YOUTH LABOUR MARKETS IN COVENTRY

Figure App4/10 : PERCENTAGE OF EMPLOYEES IN VARIOUS SECTORS - COVENTRY
JOBCENTRE AREA, 1972 AND 1983



Source: City Architects and Planning Office, Coventry City Council



Source: Estimates based on CBI Special Programmes Unit (1983, para 6.2.1)

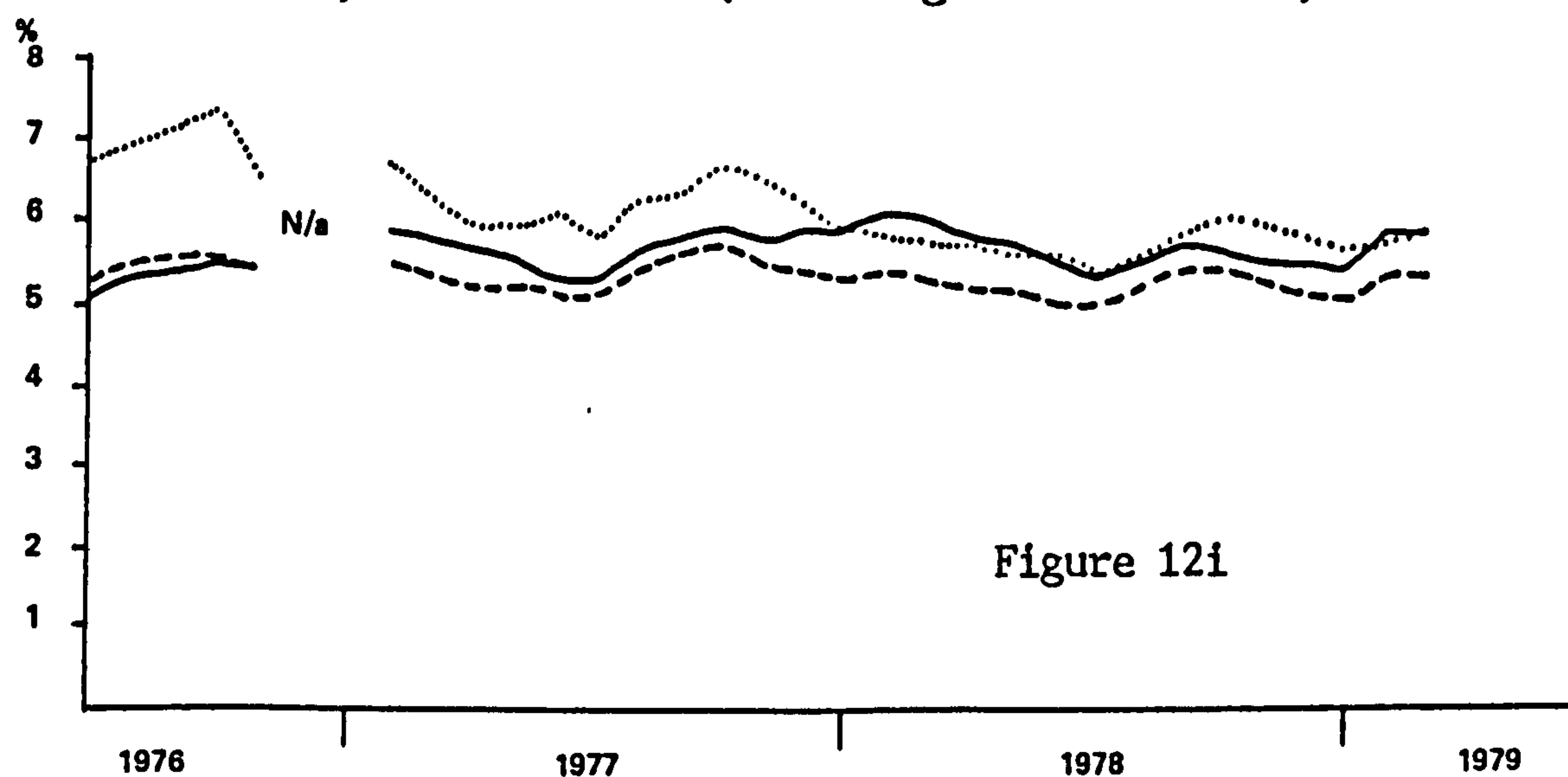
* Dudley and West Bromwich TTWAs were amalgamated in 1978 to become Dudley and Sandwell TTWA.

TRAVEL-TO-WORK AREA	June 1977	June 1978	June 1979	June 1980	June 1981	June 1982	June 1983
B'ham TTWA	No (000s) Rate (%) 42.1 6.2	40.6 5.8	40.0 5.7	51.0 7.3	96.3 13.8	113.9 16.3	113.2 16.0
Coventry TTWA	No (000s) Rate (%) 15.4 6.3	14.8 6.1	15.2 6.2	18.0 7.4	35.7 14.7	37.8 15.6	36.5 15.3
Dudley* TTWA	No (000s) Rate (%) 6.3 4.1	12.9 4.4	12.6 4.3	18.5 6.3	42.5 13.9	45.4 15.6	49.5 16.3
W Bromwich* TTWA	No (000s) Rate (%) 6.0 4.3						
Walsall TTWA	No (000s) Rate (%) 6.1 5.3	10.5 5.9	10.3 5.8	13.6 7.6	25.5 15.1	29.3 17.4	29.7 17.5
W'hampton TTWA	No (000s) Rate (%) 8.4 6.0	9.2 6.3	9.3 6.4	12.3 8.5	22.0 15.0	24.2 16.6	24.5 16.2

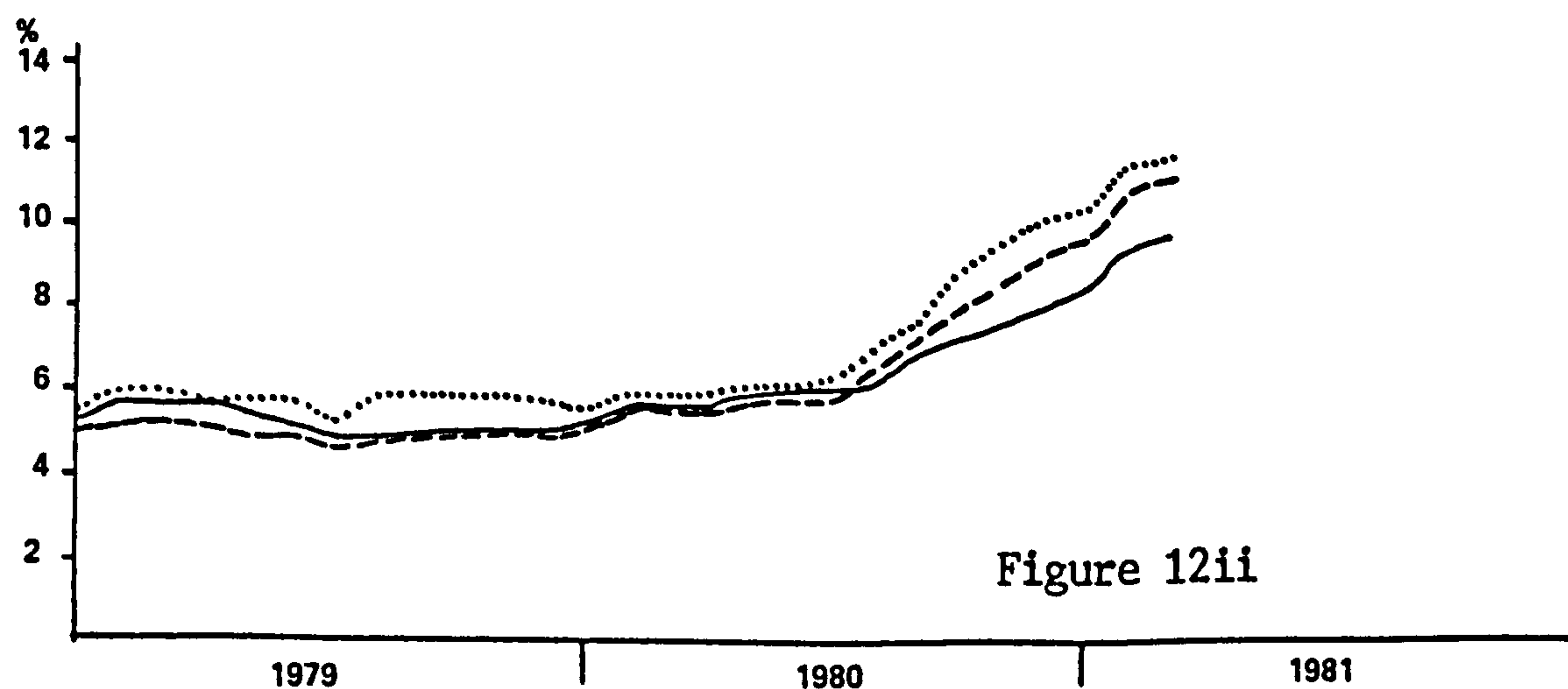
Table App4/11 : UNEMPLOYMENT BY TRAVEL-TO-WORK AREA (TTWA) - WEST MIDLANDS METROPOLITAN COUNTY, 1977-1983

Sources: 1. Annual Abstract of Statistics (1982), Central Statistical, Information and Research Unit, County Planning Department, West Midlands County Council. 2. Regional Summary of Unemployment, MSC Regional Manpower Intelligence Unit, Midlands Region. 3. Department of Employment Gazette, (for June 1977 and 1983).

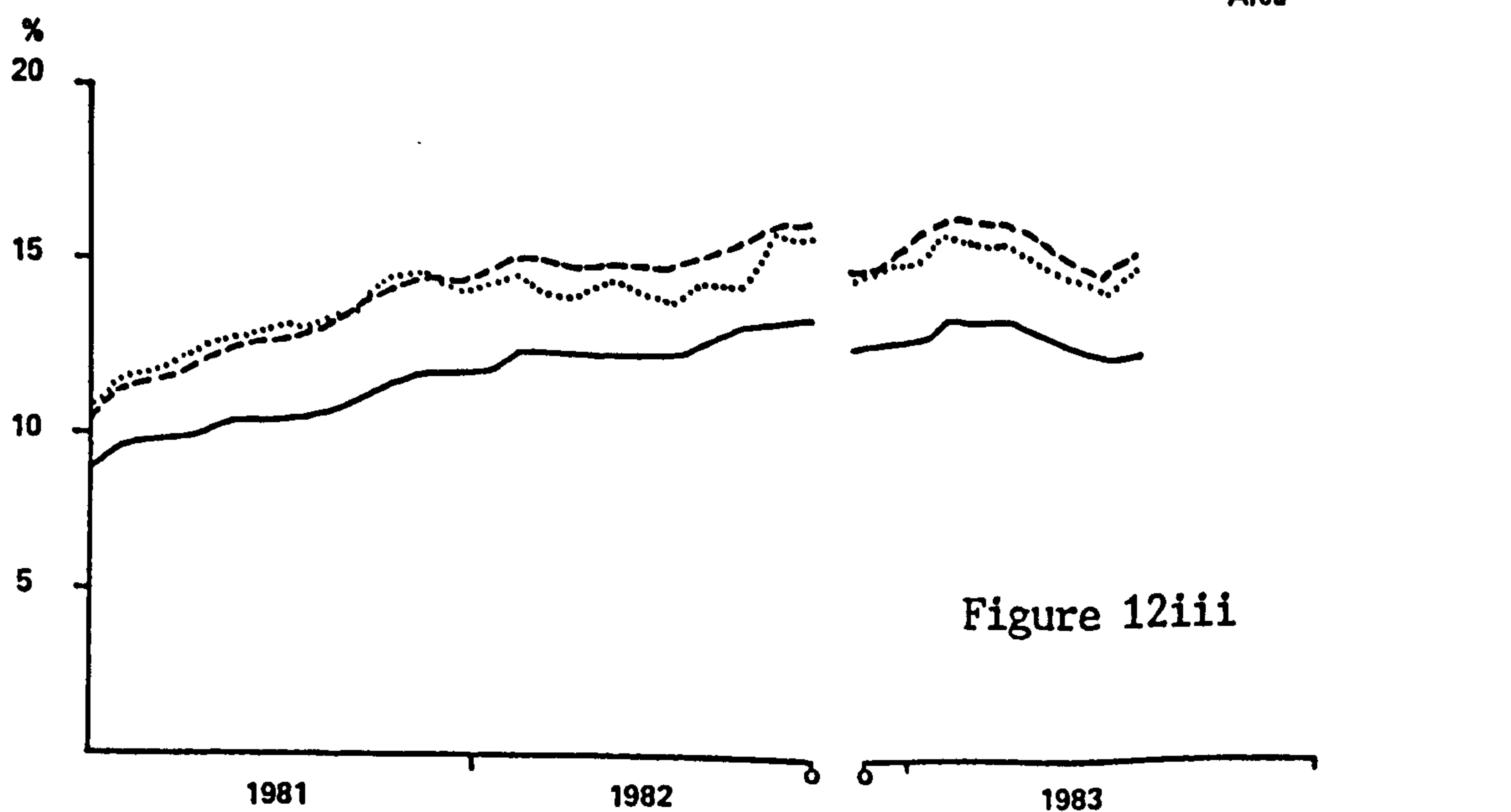
Figures App4/12i-iii : UNEMPLOYMENT RATES - COVENTRY JOBCENTRE AREA, WEST MIDLANDS REGION, GREAT BRITAIN (Excluding School Leavers)



Source (Figure 12i): Economic Monitor 1/79, Economic Unit, City Treasurer's Department, Coventry City Council.



Source (Figure 12ii): Economic Monitor 1/81.



Source (Figure 12iii): Economic Monitor 3/83

Figure App4/13 : PERCENTAGE OF UNEMPLOYED IN COVENTRY JOBCENTRE AREA IN THE UNDER-25, 25-44 AND 45+ AGE GROUPS - January and July for each year.

Source: Department of Employment, Age and Duration Statistics, Coventry Jobcentre Area

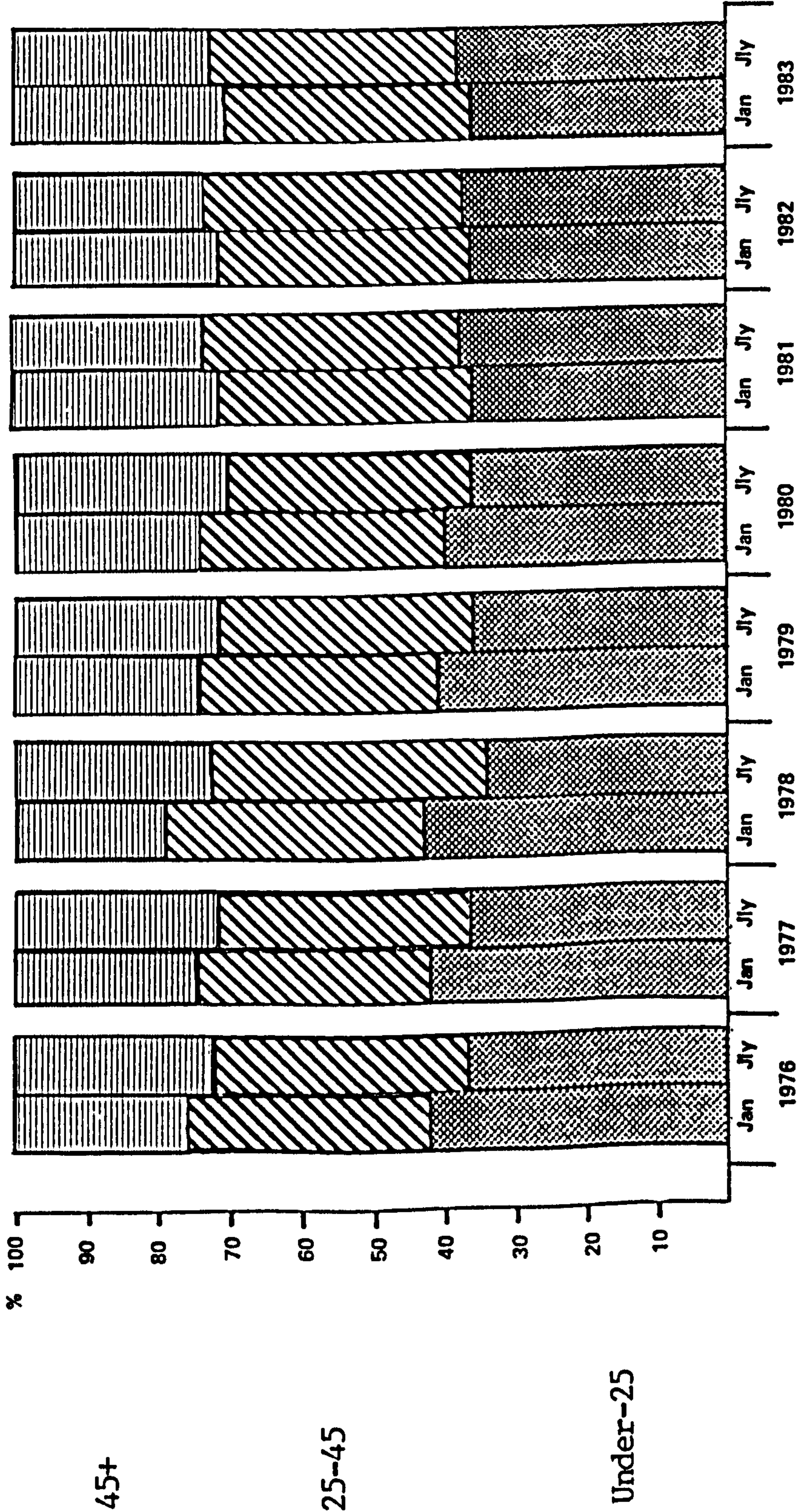


Figure App4/14 : YOUNG PEOPLE SEEKING PERMANENT EMPLOYMENT - With an 11-Monthly Moving Average Trend Line Superimposed

Source: Coventry Careers Service, Monthly Returns, Unemployed Young People

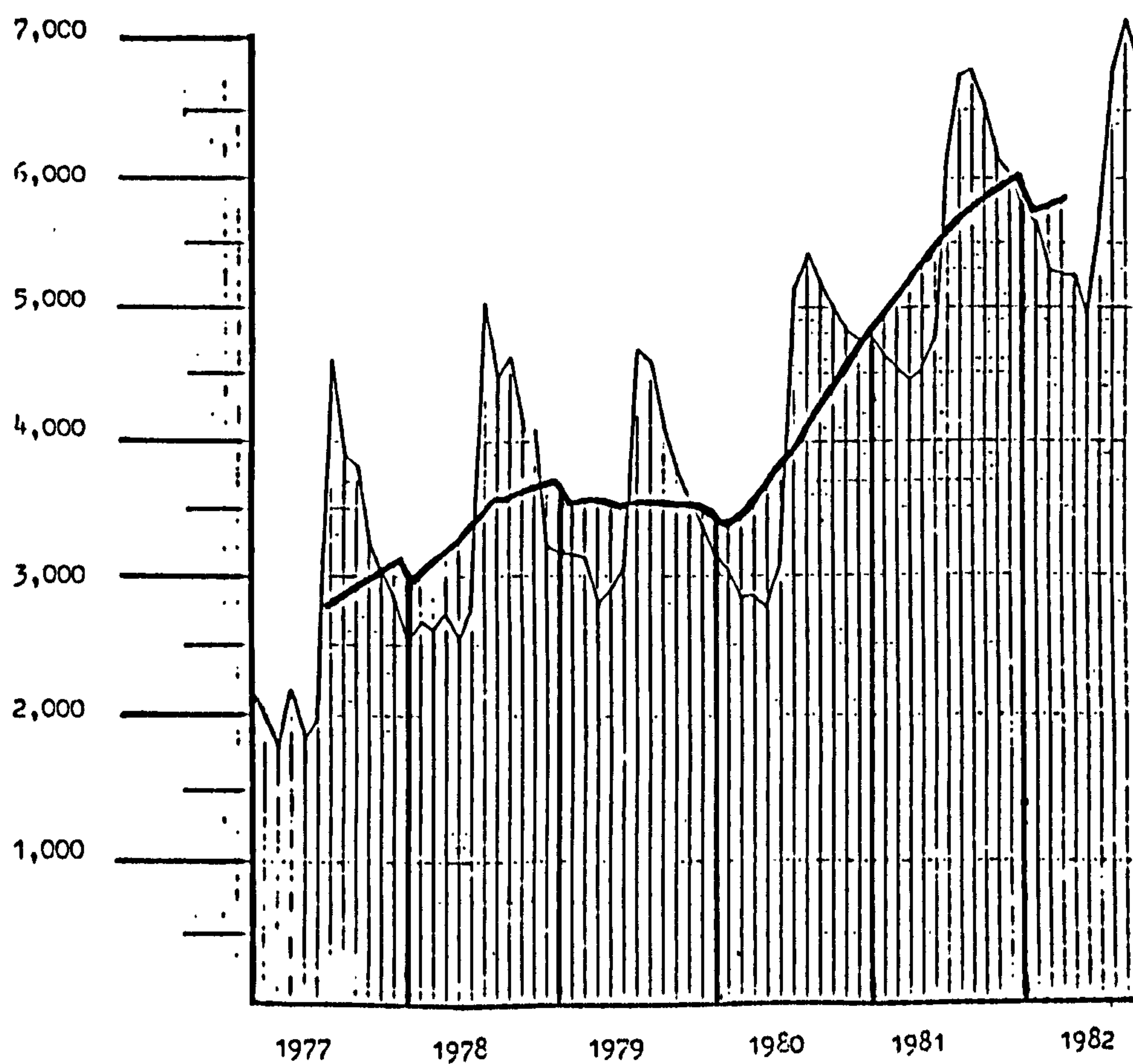


Figure App4/15 : NUMBER OF YOUNG PEOPLE ON GOVERNMENT SPONSORED PROGRAMMES, 1977-1983

Source: Coventry Careers Service, Monthly Returns, Unemployed Young People

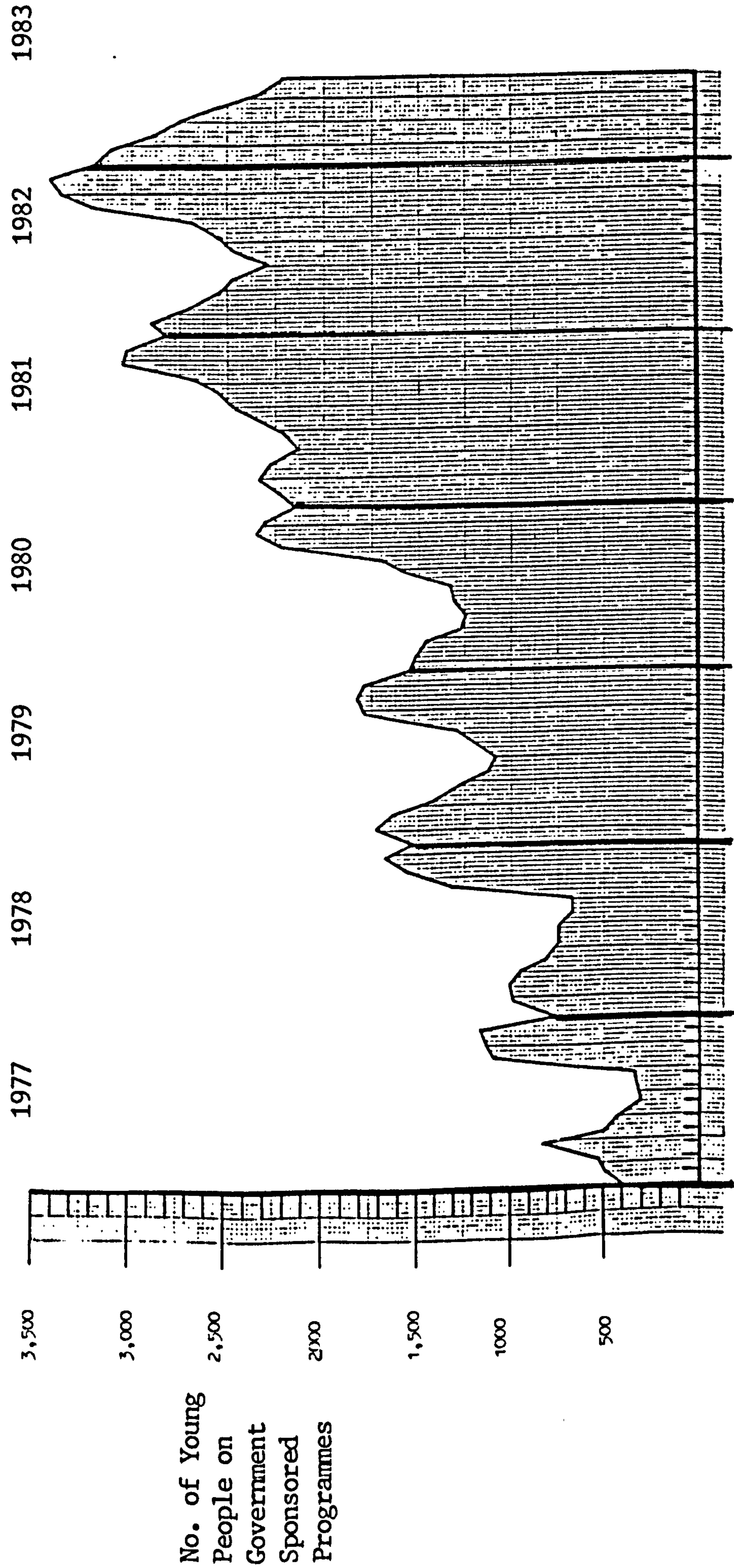


Table App4/16 : PROPORTION OF FIRMS IN THE WEST MIDLANDS REGIONAL GROUP OF CHAMBERS OF COMMERCE QUARTERLY ECONOMIC SURVEY (COVENTRY AREA) WHO EXPERIENCED DIFFICULTY IN RECRUITING MANUAL WORKERS

	<u>DATE</u>						
	<u>June</u> <u>1981</u>	<u>Sept</u> <u>1981</u>	<u>Dec</u> <u>1981</u>	<u>June</u> <u>1982</u>	<u>Sept</u> <u>1982</u>	<u>Dec</u> <u>1982</u>	<u>June</u> <u>1984</u>
<u>SKILLED MANUAL WORKERS</u>							
% of firms having difficulty recruiting these workers.....	57	46	27	36	11	12.5	34
% of firms NOT having difficulty recruiting these workers.....	43	54	73	64	89	87.5	66
<u>OTHER MANUAL WORKERS</u>							
% of firms having difficulty recruiting these workers.....	25	7	11	11	8	0	7
% of firms NOT having difficulty recruiting these workers.....	75	93	89	89	92	100	93

Source: Coventry Chamber of Commerce and Industry Quarterly Economic Surveys

(C). DATA ON WHAT CAN SCHOOLS DO? (For Chapter Fifteen).

Table App4/17 : WHAT CAN SCHOOLS DO ? (to prepare young people more adequately for apprenticeships).

WHAT SCHOOLS COULD DO TO PREPARE.....etc	(A) No. of firms saying schools could do X to prepare young people...etc.	(B) (A) as a % of ALL FIRMS (n=107)
1. More emphasis/time spent on Basics (3Rs)	28	26
2. More discipline	18	17
3. Teachers should get experience in Industry/Engineering	16	15
4. Make pupils Work Harder/ Instil Protestant Work Ethic	8	7
5. More Factory Visits/Tours	8	7
6. Specialisation in Curriculum (in last 2-3 years ¹)	7	7
7. Make Metalwork better/More Attractive	5	5
8. Put over good Image of Engineering	5	5
9. Teach Imperial Measurements in Mathematics	5	5
10 Bring Back old Technical Schools	4	4
11 More knowledge of/emphasis on Arithmetic	4	4
12 More on 'Working Life' preparation	3	3
13 Cut down on Social Studies	3	3
14 Lengthen school day/shorter holidays as pupils get older	3	3
15 Core Curriculum	3	3
16 More/Better Careers Advice	3	3
17 Better Guidance on what Industry is like	3	3
18 Work Experience while at School	3	3
19 Maths should be more tied to Engineering	2	2
20 Better School Reports	2	2
21 Bring Back Traditional Methods/ get rid of Progressive Education	2	2
22 Schools should have a clearer idea of the needs of the firm	2	2
23 Teach pupils to be more Competitive	2	2
24 Get rid of 'Silly' subjects (e.g R.E.)	2	2
25 Reduce amount of 'Play' in Primary Schools	2	2
26 Teach pupils how to be Interviewed	2	2

The following were mentioned by only one employer (1% of all CEES firms):

- | | |
|--|---|
| 27 Do Technical College Work
in 4th/5th years | 28 Set up Small Machine Shops in Schools |
| 29 Schools exempt from cuts
resulting from decrease in
rates | 30 Reduce school Leaving Age to 15 |
| 31 Metalwork Teachers to have
knowledge of Industry's
Needs | 32 Metalwork Teachers to have worked
in Industry |
| 33 There should be more Pro-
fessional Careers Teachers | 34 Centralised Testing (for
apprenticeship tests) to be carried
out in schools |
| 35 Should learn X2-X12 Tables | 36 Computers in all Schools |
| 37 Off-the-Job Training to be
done in Schools | 38 Schools should be more accountable to
Parents and Industry |
| 39 Should be Closer Links
between Industry/Education | 40 Encourage Self-Discipline |
| 41 Taught how to express them-
selves (orally) | 42 Get rid of Poor Teachers |
| 43 Reduce Pupil/Teacher ratio | 44 Taught how to apply maths |
| 45 More Personal Development | 46 Centralise exam boards (one only) |
| 47 Stop 'High Flying' ² | 48 Teachers to only teach own subjects |
| 49 Get rid of Comprehensives | 50 Schools should realise that Sheet
Metalwork needs more than just
manual skills |

OTHER RESPONSES TO THE QUESTION

	No.	%(n=107)
51 SATISFIED/Get Right people/Schools performing to requirements	6	6
52 Schools can do NOTHING - (It's the Parents)	3	3
53 Don't Know	5	5
54 Refused to Answer	1	1

Notes: 1. In work related to future careers, (e.g. Engineering - Maths, English, Metalwork, Technical Drawing, Physics).

2. Stop people getting good marks even though they do not 'push' themselves. Push pupils to their limits.

APPENDIX 5PROFILE OF THE FIRMS IN THE CEES - BY SIZE AND WHETHER THEY USED MGTS FOR RECRUITMENT

This Profile locates each firm in the CEES according to size and whether it used MGTS for recruitment. The firms are arranged alphabetically.

	MGTS/NON-MGTS	SIZE GROUP
1. ACAPULCO CAR COMPANY LTD.	NON-MGTS	GROUP E
2. ACE PATTERNMAKERS LTD.	MGTS	GROUP B
3. AEROPARTS LTD.	MGTS	GROUP A
4. ALPINE ENGINEERING CO. LTD.	NON-MGTS	GROUP A
5. ALTEX LTD.	NON-MGTS	GROUP E
6. ALTEX ENGINEERING LTD.	NON-MGTS	GROUP D
7. AMAZON ENGINEERING LTD.	MGTS	GROUP B
8. ANGLE (CUTTING) TOOLS LTD.	MGTS	GROUP A
9. ARC METALS & PLASTICS LTD.	MGTS	GROUP C
10 ARGON JIG & TOOL LTD.	MGTS	GROUP A
11 ARIEL TOOLS LTD.	MGTS	GROUP C
12 ASSOCIATED PANELS LTD.	MGTS	GROUP D
13 ATKINSON ENGINEERING (DESIGNS) LTD.	NON-MGTS	GROUP B
14 ATLANTIC JIG & TOOL CO. LTD.	MGTS	GROUP B
15 AUTO-GEARS LTD.	NON-MGTS	GROUP C
16 AUTO-RAK MACHINE TOOLS LTD.	MGTS	GROUP B
17 A. X. LTD.	NON-MGTS	GROUP A
18 BELL COMPONENTS LTD.	NON-MGTS	GROUP C
19 BIRD PANELS LTD.	MGTS	GROUP C
20 V. BROUGHTON (MACHINE TOOLS) LTD.	NON-MGTS	GROUP E
21 BURFIELD ENGINEERING LTD.	NON-MGTS	GROUP D
22 CARBITOOL LTD.	MGTS	GROUP D
23 CARBURY ACE (ENGINEERING) LTD.	NON-MGTS	GROUP C
24 CASABLANCA CARS LTD.	NON-MGTS	GROUP E
25 CASTLE ENGINEERING CO. LTD.	MGTS	GROUP A
26 CHURCH (PATTERNMAKERS) LTD.	NON-MGTS	GROUP A

27	D. CLARKE (ENGINEERS) LTD.	MGTS	GROUP C
28	CLASSIC ENGINEERING LTD.	MGTS	GROUP A
29	CONQUEST INTERNATIONAL LTD.	NON-MGTS	GROUP E
30	COURT (MANUFACTURING) CO. LTD.	MGTS	GROUP D
31	CRAIG BROS. (PRECISION INSTRUMENTS) LTD.	MGTS	GROUP B
32	F. CROSS & SONS (SHEET METAL & COMPONENTS) LTD.	MGTS	GROUP C
33	D. AND L. PATTERNS	NON-MGTS	GROUP A
34	DAVIES-ROCHE LTD.	NON-MGTS	GROUP A
35	DAY & HAYWARD (SHEET METAL) LTD.	NON-MGTS	GROUP A
36	DELTRON RADIATORS LTD.	NON-MGTS	GROUP D
37	D-GEAR AND EQUIPMENT LTD.	MGTS	GROUP B
38	DIAMOND (PATTERNMAKERS) LTD.	MGTS	GROUP A
39	DRYDEN ELECTRIC HAMMERS LTD.	MGTS	GROUP C
40	A. R. DUFF (ENGINEERING) LTD.	NON-MGTS	GROUP A
41	DUNKLEY GAUGE, JIG & TOOL CO. LTD.	MGTS	GROUP B
42	E.G.M. ENGINEERING LTD.	NON-MGTS	GROUP A
43	FAIRFAX ENGINEERING CO.	MGTS	GROUP A
44	FOX ELECTRICAL ENGINEERS LTD.	NON-MGTS	GROUP A
45	GREENGATE CYCLE PRODUCTS LTD.	MGTS	GROUP C
46	A. H. HARPER (FABRICATIONS) LTD.	MGTS	GROUP A
47	HARVEY & BRINTON LTD.	MGTS	GROUP C
48	H.F.C. (UK) LTD.	NON-MGTS	GROUP E
49	HILLS GEARS LTD.	MGTS	GROUP B
50	IMPERIAL CARRIERS LTD.	NON-MGTS	GROUP E
51	JAY PRESS TOOLS LTD.	NON-MGTS	GROUP A
52	JUPITER PATTERNS	NON-MGTS	GROUP A
53	K-CABS LTD.	MGTS	GROUP C
54	MEADOWCROFT TOOLS	NON-MGTS	GROUP A
55	G. A. MELTON LTD.	NON-MGTS	GROUP A
56	MERCURY (AERO PRODUCTS) LTD.	NON-MGTS	GROUP C
57	METAL PRECISION LTD.	MGTS	GROUP A
58	METAGEAR MACHINES LTD.	MGTS	GROUP C
59	MIDLAND METAL MOULDS CO. LTD.	NON-MGTS	GROUP A
60	MINEX COMMUNICATION SYSTEMS LTD.	NON-MGTS	GROUP E
61	MODERN PATTERNS	NON-MGTS	GROUP A
62	MORTON JAMES PRECISION TOOLS LTD.	NON-MGTS	GROUP D
63	NEW MIDLAND SHEET METAL CO. LTD.	MGTS	GROUP B

64	NORTHSIDE GEAR CO.	NON-MGTS	GROUP B
65	OLD MILL SHEET METAL CO. LTD.	MGTS	GROUP C
66	OLDTHORPE GEAR GRINDING CO.	NON-MGTS	GROUP A
67	OLMEC MACHINE TOOLS LTD.	NON-MGTS	GROUP D
68	ORBIT ENGINEERING LTD.	MGTS	GROUP C
69	ORION PRODUCTS LTD.	NON-MGTS	GROUP E
70	PANTHER RADIATOR COMPANY	MGTS	GROUP C
71	PARKINSON BROS. & CO. LTD.	MGTS	GROUP C
72	PASSMORE TURBINES LTD.	NON-MGTS	GROUP C
73	POWER ENGINEERING CO.	NON-MGTS	GROUP A
74	PRECISION AERO COMPONENTS LTD.	NON-MGTS	GROUP A
75	PYRAMID SHEET METAL CO.	NON-MGTS	GROUP A
76	QUANTEX HYDRAULIC SYSTEMS LTD.	NON-MGTS	GROUP C
77	REDLAND SHEET METAL & FABRICATIONS LTD.	MGTS	GROUP A
78	G. ROBERTS (PRECISION ENGINEERING) CO. LTD,	NON-MGTS	GROUP A
79	ROLLOGEARS LTD.	MGTS	GROUP A
80	REX HYDRAULIC COMPONENTS LTD.	MGTS	GROUP B
81	SAMUEL GARFIELD ENGINEERING	NON-MGTS	GROUP A
82	SARLIN ENGINEERING LTD.	NON-MGTS	GROUP A
83	S.D. MACHINE TOOLS LTD.	MGTS	GROUP D
84	S. SHARPE & SON (ENGINEERS) LTD.	MGTS	GROUP C
85	H. SMITH (TOOLS) LTD.	MGTS	GROUP C
86	SPEEDTOOL ENGINEERING CO. LTD.	NON-MGTS	GROUP A
87	STANFORD ENGINEERING LTD.	MGTS	GROUP A
88	STAR PATTERNMAKING	NON-MGTS	GROUP A
89	B. STYLES (ENGINEERING) CO.	NON-MGTS	GROUP A
90	SUMMIT TOOLS & COMPONENTS LTD.	MGTS	GROUP A
91	SUPERTOOL & GAUGE CO. LTD.	MGTS	GROUP A
92	TALCOTT METALS CO. LTD	MGTS	GROUP C
93	TELTEC SYSTEMS LTD.	NON-MGTS	GROUP A
94	TOPCRAFT MACHINE TOOLS	NON-MGTS	GROUP A
95	TOPMARK (TOOLS) LTD	MGTS	GROUP A
96	TRANSCO LTD.	NON-MGTS	GROUP E
97	TRINITY PATTERNS CO.	NON-MGTS	GROUP A
98	TUDOR PANELS LTD.	NON-MGTS	GROUP A
99	UNITED INDUSTRIAL FASTENERS LTD.	NON-MGTS	GROUP D
100	VIKING PATTERNS	NON-MGTS	GROUP A

101 VORTEX PATTERNS	NON-MGTS	GROUP A
102 WINGFIELD TRANSMISSIONS LTD.	NON-MGTS	GROUP C
103 WOODWARD ELECTRONICS LTD.	NON-MGTS	GROUP A
104 C. W. WRIGHT ENGINEERING LTD.	NON-MGTS	GROUP A
105 WROXBOROUGH JIG & GAUGE LTD.	MGTS	GROUP B
106 ZARGON ENGINEERING LTD.	NON-MGTS	GROUP C
107 Z. DESIGNS LTD.	NON-MGTS	GROUP A

APPENDIX 6COVENTRY CAREERS SERVICE CLASSIFICATION OF OCCUPATIONAL GROUPS ENTERED BY
FIFTH FORM LEAVERS

OCCUPATIONAL GROUP

AGRICULTURE - Agriculture, horticulture, work with animals and professional sport.

BUILDING - Building, construction and civil engineering.

CREATIVE - Printing, photography, floristry and fashion.

HAIRDRESSING

RETAIL - Retail and wholesale distribution.

ENGINEERING - Mechanical engineering, manufacturing and servicing occupations.

MANUFACTURING - All other manufacturing and servicing occupations.

ELECTRICAL - Radio and T.V. repair and electrical engineering.

CATERING - Hotel, catering and domestic occupations.

MINING

CARING - Nursing, nursery nursing and dental receptionists.

OFFICE - Clerical and secretarial occupations.

SCIENTIFIC - Includes laboratory assistants.

GARAGE WORK - Motor repair trades, forecourt attendants and car

salespersons.

UNIFORMED SERVICES

NOT SPECIFIED/UNCLASSIFIABLE

Source: CCS (1984), Appendix 1.

APPENDIX 7: THE CLASSIFICATION OF ATTRIBUTES

This Appendix shows how the various attributes employers looked for in applicants for engineering apprenticeships in the CEES and youth jobs in Cuming's (1983) study were classified.

THE CEES CLASSIFICATION

CUMING'S (1983) CLASSIFICATION

Work AttitudesWork Attitudes

General:

All:

1. Good attitude to work/Wants to work
2. 'A Doer' - interested in doing things
3. Punctual/Good timekeeper
4. Perseverance/Consistent effort
5. Disciplined/Self-disciplined
6. Know what they want to do in the future
7. Staying Power/Can stick at a job
8. Conscientious
9. Willing to learn
- 10 Motivation/Self-motivated
- 11 Interested (in things)

1. Efficient
2. Has perseverance
3. Dedicated
4. Industrious
5. Willing to Learn
6. Conscientious
7. Disciplined
8. Motivated
9. Good attendance
- 10 Punctual
- 11 Quiet worker
- 12 Acceptable attitude to discipline
- 13 Promotion potential
- 14 Has application
- 15 Willing to put in overtime
- 16 Trainable
- 17 Has direction in life
- 18 Able to accept boring work
- 19 Able to work with minimum supervision
- 20 Willing to Work*
- 21 Committed*
- 22 Quick worker*
- 23 Receptive*
- 24 Prepared to work Saturdays*

Specific:

- 12 Interested in job/trade
- 13 Interested in interview
- 14 Interested in apprenticeship
- 15 Interested in engineering
- 16 Interested in factory tour
- 17 Interested in making things
- 18 Wants to go to tech
- 19 Wants to work with hands
- 20 Likes technical drawing/metalwork.
- 21 Doesn't mind doing homework (from tech)
- 22 Wants skilled work
- 23 Doesn't mind getting hands

dirty

Personality Traits

- 24 Alertness/'Looks alive!'
- 25 Pleasant personality
- 26 Tidy
- 27 Ambitious
- 28 Self-confident
- 29 Stable (not a tearaway)
- 30 Has Character/Personality
- 31 Adaptable and flexible
- 32 Copes (with manual work)
- 33 Extrovert/Outgoing personality
- 34 Studious
- 35 Neat
- 36 Awareness
- 37 Quiet type/Introvert
- 38 Has leadership qualities
- 39 Keen/Enthusiastic

Personality Traits

- 25 Enthusiastic
- 26 Show initiative
- 27 Has leadership qualities
- 28 Extrovert
- 29 Mature
- 30 Independent
- 31 Stable
- 32 Adaptable
- 33 An opportunist
- 34 Individuality
- 35 Has own views
- 36 General personal qualities
- 37 Not ambitious
- 38 Open-minded
- 39 Patient
- 40 Ambitious
- 41 Money motivated*
- 42 Has outside interests*
- 43 Observant*
- 44 Decisive*
- 45 Determined*
- 46 Resilient*
- 47 Able to sell him/herself*
- 48 Has sense of humour*
- 49 Confident*

Social Attitudes

- 40 Responsible
- 41 Ability to mix and fit in
- 42 Honesty
- 43 Obedient
- 44 Interest in life

Social Attitudes

- 50 Responsible
- 51 Co-operative
- 52 Honest
- 53 Friendly
- 54 Trustworthy
- 55 Has integrity
- 56 Polite
- 57 Reliable
- 58 Obedient
- 59 Respectable*
- 60 Has had no trouble with police*

Learned Skills

- 45 Articulate/Talks well
- 46 Ability to read drawings

Learned Skills

- 61 Accurate
- 62 Produces high class work

47 Good letter writer
 48 Good on 3Rs (numeracy/lit.)
 49 Good in technical drawing
 50 Good at Maths
 51 Can apply Maths
 52 Reasonable English
 53 Interview performance

63 Able to read
 64 Able to write
 65 Able to spell
 66 Able to communicate (including articulacy)
 67 Reasonable command of basic Maths
 68 A certain educational standard
 69 Reasonable command of English
 70 Able to keep accurate records
 71 Mechanical interest/ability
 72 Good telephone manner*
 73 Neat writer*
 74 Good standard of application forms*

General Abilities

54 Intelligence
 55 Academic ability
 56 Practical ability
 57 Technical ability
 58 Ability to learn
 59 Common sense
 60 Asset to the company
 61 Inquisitive/Asks questions
 62 Aptitude for the job (in general)
 63 Creative

General Abilities

75 Has common sense
 76 Intelligent
 77 Imaginative
 78 Has basic ability
 79 Good problem solver
 80 Practical
 81 Good all-rounder
 82 Able to follow instructions
 83 Has analytical mind*
 84 Inquisitive/Has enquiring mind*
 85 Has academic ability*
 86 Has organising ability*
 87 Able to think logically*

Qualifications

64 Qualifications
 65 Consistent effort in school
 66 Does well at (company) tests
 67 Good school report

Qualifications

88 Has a range of qualifications
 89 Has suitable qualifications
 90 Has minimum qualifications
 91 Able to cope with industrial/professional examinations
 92 Has good references/reports/school record
 93 Able to pass company selection tests
 94 Stayed on at school to gain extra qualifications

Physical Qualities

68 Physically capable
 69 Good health

Physical Abilities

95 Able to work long hours
 96 Physically suitable

70 Manual dexterity/Good with hands

97 Has manual dexterity
98 Well co-ordinated
99 Able to work shifts*
100 Good at sport*

Circumstantial Elements

Appearance:

71 Clean
72 Appearance
73 Bearing

Social and Leisure Activities

74 Hobbies/Interests/Sports
75 In clubs/societies at school

Circumstantial Elements (Other)

76 Wants to work at X (thinks it is a good firm)
77 Acceptable background (e.g. father in engineering)
78 Good relationship with school
79 Well behaved at school
80 Good relationship with parents
81 Did metalwork/engineering at school
82 No criminal record
83 Been round other firms
84 Parents want him to do apprenticeship in engineering
85 Parental interest

Circumstantial Elements

101 Willing to stay with firm
102 Is company person
103 Has specific interest related to job
104 Has specific skill related to job
105 Has smart appearance
106 Is from suitable environmental background
107 Is from stable home background
108 Enjoys travel
109 Has had previous part-time work
110 Has had previous practical experience
111 Is lacking academic achievement
112 Is male school leaver
113 Is mature woman with grown-up children
114 Has interest in agriculture
115 Has own transport*
116 Has own accommodation*
117 Is ready to work early mornings*
118 Does not have too long hair*
119 Does not live too far away*
120 Has knowledge of geography*
121 Mobile*
122 Is appropriate age*
123 Clean*
124 Has love of animals*
125 Knows about the company*
126 Has genuine reasons for applying for*

Unclassifiable

127 Alert (Social/Work Attitude)
128 Energetic (Personality/Physical Ability)
129 Able to work in a team (Social/Work Attitude)

Notes

There are some differences between the CEES classification and Cuming's. The main difference is on specific work attitudes. Cuming located only two of these, which he classified as circumstantial elements; (Cuming 103 and 114). In the CEES, the employers were very concerned that applicants not just wanted to work in general, but wanted to work in engineering in specific engineering jobs and trades. General work attitudes relate to wanting to work, being motivated and so on, in abstraction from any particular type of work. Specific work attitudes are about wanting to work in a specific type of job, trade or industry and willing to accept elements attached to the job; in this case apprenticeship, day release, skilled status.

Another difference is that alertness was placed in personality traits in the CEES, as against being unclassifiable in Cuming's study. The CEES reference was slightly different; alertness - implying a type of person who was generally alert, rather than alert in specific situations. It was also supplemented by 'look alive!', which suggests that the applicant was not dozy, lethargic and apathetic - which sounds like a personality trait.

A third difference involved putting 'no criminal record' in circumstantial elements in the CEES, as against 'has had no trouble with the police' going into social attitudes in Cuming. They are not strictly identical. It is possible to get into trouble with the police but not have a criminal record. It seemed to me that the circumstantial element was more important than that it indicated a social attitude; young people's social attitudes might have changed after having been in trouble, or they might have been wrongly arrested. What is clear is that they all share a certain circumstantial position.

In the CEES, where attributes have been conjoined (for example, punctual/good timekeeper), one of the following situations pertained. Either the elements were very close and could not be separated in meaning, or one element was defined in terms of the other (for example, a lad had a good attitude to work if he wanted to work), or the employers tended to run the elements together, (hobbies, interests and sports) as though they had the

same significance.

Cuming's study included two open-ended questions on what employers looked for. The first was on what the employers' ideal employee would be, and the second was on what employers were looking for in applicants at interview. The latter threw up references to 91 attributes. In the question on the ideal employee, 38 attributes were referred to which did not figure in the question on what was looked for at interview. These are indicated by a *. Cuming's classification included all 129 attributes.

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